

**Via FedEx**

October 24, 2012

Mr. Lance Nixon  
Superfund Enforcement Assessment Section (6SF-TE)  
U.S. Environmental Protection Agency, Region 6  
1445 Ross Avenue  
Dallas, Texas 75202-2733

Re: **Cedar Chemical Corporation Superfund Site, West Helena, Phillips County, Arkansas,**  
SSID No. 06NH

Dear Mr. Nixon:

Goodrich Corporation, a UTC Aerospace Systems Company (formerly known as The B.F. Goodrich Company) ("Goodrich"), submits this letter and exhibits on the enclosed CD in response to the United States Environmental Protection Agency ("EPA") Request for Information ("Request") regarding the Cedar Chemical Corporation Superfund Site in West Helena, Phillips County, Arkansas ("the Site"). Goodrich received the corrected Request on September 25, 2012.

In order to respond to EPA's Request, Goodrich conducted a good faith search for responsive information in its possession, custody and control regarding the Cedar Chemical Company ("Cedar Chemical") and/or the Site. Nevertheless, because of the breadth of information requested, it is possible that Goodrich has not yet found all relevant information. Therefore, Goodrich reserves the right to supplement its response if it uncovers additional information.

Goodrich objects to EPA's Request in that some of the questions are vague, unnecessarily broad, and unduly burdensome. Goodrich further objects to EPA's Request to the extent the specific requests assume or suggest that Goodrich arranged for the disposal of any hazardous waste, hazardous substances or other materials at the Site. As explained in more detail below, Goodrich entered into agreements with Cedar Chemical for the purpose of Cedar Chemical formulating useful products for Goodrich. As Goodrich entered into these agreements with Cedar Chemical with the intention of Cedar Chemical creating useful products, Goodrich did not intend for or have knowledge of or reason to believe that any of the raw materials it provided to Cedar Chemical would be disposed of at the Site.

While Goodrich has made a diligent effort to respond to this request, please understand that Goodrich is not waiving any of its objections to the scope and nature of EPA's Request.

RECEIVED

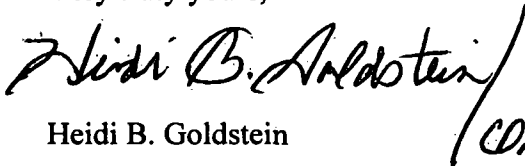
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SUPPLEMENTARY DIV.  
DIRECTOR'S OFFICE

Mr. Lance Nixon  
October 24, 2012  
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If you have any questions, do not hesitate to contact me at (216) 566-5559.

Very truly yours,

  
Heidi B. Goldstein

Enclosure

Copy: William F. Leikin, Goodrich Corporation  
Bruce C. Amig, Goodrich Corporation

## ANSWERS TO SPECIFIC QUESTIONS

- 1. Please provide the full legal name, mailing address, and phone number of the Respondent.**

Response to Request 1: Goodrich Corporation, a UTC Aerospace Systems Company, Four Coliseum Centre, 2730 West Tyvola Road, Charlotte, North Carolina, 28217, (704) 423-7000.

- 2. For each person answering these questions on behalf of the Respondent provide full name, title, business address, and business telephone and fax number.**

Response to Question 2: Counsel for Goodrich worked with various individuals at Goodrich to identify information responsive to the Request, including:

Mr. Bruce C. Amig  
Director Global Remediation Services  
Goodrich Corporation, a UTC Aerospace Systems Company  
Four Coliseum Centre  
2730 West Tyvola Road  
Charlotte, NC 28217-4578  
Phone: (704) 423-7071  
Fax: (704) 423-7572

- 3. If the respondent wishes to designate an individual for all future correspondence concerning this Site, including legal notices, please provide the individual's name, address, telephone number and fax number.**

Response to Request 3: Please direct all future correspondence regarding this and related matters to:

Heidi B. Goldstein  
Thompson Hine LLP  
3900 Key Center  
127 Public Square  
Cleveland, Ohio 44114-1291  
Phone: (216) 566-5559  
Fax: 216-566-5800  
Email: Heidi.Goldstein@thompsonhine.com

- 4. Please explain the business relationship between your company and Cedar Chemical Corporation.**

Response to Request 4: Goodrich objects to this Request because it is vague and overbroad, and the term "business relationship" is undefined. Without waiving these objections, Goodrich responds that its former Specialty Polymers and Chemicals Division entered into a Custom Manufacturing Agreement with Cedar Chemical on July 2, 1990 ("1990 Agreement") (a copy is attached as Exhibit A) for the manufacture of Telene RIM over a limited time. The 1990 Agreement had an initial term of three years. Pursuant to this Agreement, Goodrich provided



dicyclopentadiene ("DCPD") to Cedar Chemical to be used in the manufacturing process. To the best of Goodrich's knowledge and belief, there is no DCPD contamination present at the Site.

Goodrich's former Specialty Polymers and Chemicals Division and Cedar Chemical entered into an amended agreement on July 2, 1992 ("1992 Agreement") (a copy is attached as Exhibit B), which extended the agreement for Cedar Chemical to manufacture the useful product Telene RIM for Goodrich to June 30, 1994 and allowed for renewal from year to year until either party terminated the Agreement.

On July 1, 1997, Cedar Chemical and Goodrich's former Specialty Chemicals Division entered into a second amended agreement ("1997 Agreement") (a copy is attached as Exhibit C). The 1997 Agreement extended the term of the 1990 Agreement for Cedar Chemical to manufacture the product Telene RIM until December 31, 2000.

On August 1, 2000, Goodrich entered into a Limited Liability Company Agreement with Advanced Polymer Technologies, LLC (now Cymetech Corporation), forming a joint venture called APT, LLC ("APT") (a copy is attached as Exhibit D). On August 1, 2000, APT and Cedar Chemical entered into a Custom Manufacturing Agreement ("2000 Agreement") (a copy is attached as Exhibit E). As with the previous agreements between Goodrich and Cedar Chemicals, the purpose of the 2000 Agreement was for Cedar Chemical to manufacture the product Telene RIM for APT. In or around August 2000, Goodrich and Cedar Chemical terminated the 1990 Agreement, as subsequently amended, so that Cedar Chemical could enter into and perform under the 2000 Agreement.

5. **Identify all transactions with the Site owners and/or operators of the Site that resulted in materials being sent to the Site by you for any purpose. Identify and provide all documents related to each transaction, including but not limited to invoices, manifests, shipping papers, bills of lading, receipts, log book entries, trip tickets, work orders, contracts, documents showing the nature of the materials involved, and any EPA and/or State environmental filings or correspondence. For each transaction, identify and state:**
- a. **The type and purpose of the transaction;**
  - b. **A description of the materials involved, including their quantity and chemical content and characteristics;**
  - c. **Any amounts paid by you in connection with each transaction;**
  - d. **The date of each transaction; and**
  - e. **The date the materials were sent to the Site.**

Response to Request 5: Goodrich objects to this Request because it is vague, overly broad and unduly burdensome. Goodrich also objects to the terms "transactions" and "purpose" which are undefined. Without waiving these objections, please see the response to request no. 4 above. The specific terms of the contracts speak for themselves. Further responding, please see the attached Exhibits F-R for additional documents potentially responsive to this request. **Please**

**note that the attached Exhibits M and O are submitted pursuant to Business Confidentiality claims under 40 CFR Part 2, Subpart B. Goodrich supports its Business Confidentiality claims with the statement included at the end of this response.**

- 6. Provide a copy of the tolling agreement between your company and Cedar Chemical, including any restatements, amendments, or other documents. If there are any other tolling agreements, or joint operating agreements, with other companies, provide copies of such agreements.**

Response to Request 6: See the response to Request No. 4 above.

- 7. Identify all persons, including you, who may have arranged to have the raw materials mixed at Cedar Chemical Inc. In addition identify the owners of the hazardous materials involved in each such arrangement.**

Response to Request 7: Goodrich objects to this Request to the extent that it assumes that any of the materials involved in the arrangements with Cedar Chemical were hazardous materials. Goodrich further objects to this Request because it is vague and assumes that Goodrich arranged to have raw materials mixed at Cedar Chemical. Without waiving these objections, Goodrich's former Specialty Polymers and Chemicals Division/Specialty Chemicals Division contracted with Cedar Chemical to manufacture a useful product. Further responding, in 2000, Goodrich also formed a joint venture with Advanced Polymer Technologies (now Cymetech Corporation) which entered a similar arrangement with Cedar Chemical. See the response to Request No. 4 above.

- 8. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available.**

Response to Request 8: Goodrich has no specific knowledge that documents are no longer available, but Goodrich no longer owns the facility that contracted with Cedar Chemical, and thus, does not have access to any documents or other records that may be located at the facility that may be responsive to this Request.

### **Business Confidentiality Claim**

Goodrich submits Exhibits M and O subject to business confidentiality claims pursuant to 40 CFR Part 2, Subpart B. Goodrich requests that EPA maintain the confidentiality of all information contained in these documents as indicated on each document to the fullest extent permitted by law. Goodrich has not voluntarily disclosed the attached documents to any other party. Since the creation of these documents, Goodrich has taken reasonable measures to protect the confidentiality of the documents and the information contained therein. The information in the attached documents is not and has not been reasonably obtainable without Goodrich's consent by other persons by use of legitimate means. Although Goodrich has sold its interests in the Telene RIM business, it has entered into agreements protecting the confidentiality of certain proprietary and technical process information contained in these documents. For these reasons, Goodrich intends to continue to take measures to protect the confidentiality of these documents indefinitely.

# TARGET SHEET

**SITE NAME:** CEDAR CHEMICAL CORPORATION

**CERCLIS I.D.:** ARD990660649

**TITLE OF DOC.:** GOODRICH CORPORATION RESPONSE TO  
104(E) REQUEST FOR INFORMATION

**DATE OF DOC.:** 10/24/2012

**NO. OF PGS. THIS TARGET SHEET REPLACES:** 22

**SDMS #:** 9339693 **KEYWORD:** 90.07

**CONFIDENTIAL ?** ☒ **MISSING PAGES ?** ☐

**ALTERN. MEDIA ?** ☐ **CROSS REFERENCE ?** ☐

**LAB DOCUMENT ?** ☐ **LAB NAME:**

**ASC./BOX #:**

**CASE #:**  **SDG #:**

THIS TARGET SHEET REPLACES PAGES 8-39,  
EXHIBITS M AND O, WHICH HAVE BEEN REDACTED  
UNDER FOIA EXEMPTION 4 - CONFIDENTIAL  
**COMMENTS :** BUSINESS INFORMATION.

Rec'd 8-10-90  
From G. PRATT.

CUSTOM MANUFACTURING AGREEMENT

Between

THE B.F. GOODRICH COMPANY

and

CEDAR CHEMICAL CORPORATION

EXHIBIT

A

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## CUSTOM MANUFACTURING AGREEMENT

THIS AGREEMENT dated as of the 2nd day of July, 1990, by and between The B.F. GOODRICH COMPANY, a New York corporation, through its Specialty Polymers and Chemicals Division, having offices at 9911 Brecksville Road, Brecksville, Ohio 44141-3247 (hereinafter called "BFG"), and CEDAR CHEMICAL CORPORATION, a Delaware corporation, having offices at 5100 Poplar Avenue, Memphis, Tennessee 38137 (hereinafter called "CEDAR");

### WITNESSETH:

WHEREAS, BFG desires to have CEDAR manufacture dicyclopentadiene ("DCPD") comonomer formulations exclusively for BFG, using BFG proprietary information, meeting the specifications attached hereto and made a part hereof as Exhibit A (hereinafter called "Product"); and

WHEREAS, CEDAR, an experienced toll manufacturer, is willing to convert, at CEDAR'S facility located in West Helena, Arkansas (the "Facility"), Raw Materials into Product exclusively for BFG, upon the terms and conditions hereinafter provided;

NOW, THEREFORE, in consideration of the mutual agreements hereinafter set forth, it is hereby agreed between the parties hereto as follows:

ARTICLE I - SUPPLY OF TECHNOLOGY, RAW MATERIALS AND CONVERSION

(a) The BFG proprietary technology that BFG will provide to CEDAR includes, but is not limited to, the detailed process steps in Exhibit B as well as the specifications for Raw Materials in Exhibit C (the "Raw Materials"), the Product, and the process technology. BFG shall make available to CEDAR, during start-up, personnel sufficiently skilled to teach or transfer its technology to CEDAR'S personnel.

(b) BFG, at its own expense and risk, shall deliver all Raw Materials (except nitrogen), labels and packaging supplies necessary for the manufacture of Product to CEDAR at CEDAR'S Facility at such times and in such quantities as will enable CEDAR to meet BFG's orders for Product.

(c) CEDAR will convert such Raw Materials into Product subject to the terms and conditions of this Agreement.

(d) This Agreement has four (4) phases: (i) Trial Run; (ii) Scale-up Runs; (iii) Initial Commercial Runs, and (iv) Commercial Runs. It is the parties' joint intention to produce in specification Product in all phases of the Agreement.

(i) In the Trial Run, CEDAR will make best efforts to deliver to BFG approximately 15,000 to 20,000 pounds of Product that meets the specifications in Exhibit A.

(ii) In the Scale up Run(s), both parties will make best efforts to optimize productivity to bring product cost into a commercial range. Feed blend overheads will be recycled, and the parties will use their best efforts to optimize yield.



- (iii) Initial Commercial Runs will commence on the run after the first Scale up Run that averages 20,000 pounds of Product per day. A mutually acceptable initial standard yield will be set for Initial Commercial Runs. Both parties will use their best efforts to quickly optimize standard yield and productivity and reach the targeted productivity rates. Conversion fees will be adjusted to a per pound basis in this phase as set forth in Article IV. Standard Yield and productivity shall be set forth in Exhibit G to this Agreement.
- (iv) Commercial Runs will commence on the run after the first Initial Commercial Run that averages the target goal of 40,000 pounds of Product per day, or when it is mutually agreed that productivity has reached a practical level. Conversion fees will be calculated as set forth in Article IV and documented in Exhibit G.

(e) Initial Commercial and Commercial Runs will include a mixture of different types of Product formulations, as will be initially set forth in Exhibit A. Additional Product formulations may be added to Exhibit A from time to time by mutual agreement. Similar Product formulations, which include but are not limited to carbon black "B" formulations, "A" formulations with varying alcohol ratios, DCPD trimer formulations, and the feed blend itself as a Product, will be toll manufactured at the same fee as determined for Product, as set forth herein, unless the cost to produce such additional Product formulations would be significantly greater than the cost to produce Product. CEDAR will have the opportunity to review these formulations before they are added.

It is not CEDAR'S intention to change the toll fee for every minor modification in the process. From what CEDAR knows today, the additional Product formulations described in this paragraph will not change CEDAR'S operating costs and therefore, will not change the tolling fee paid to CEDAR.

(f) Once the Initial Commercial Run period begins, in CEDAR'S invoice for each month, production below the agreed-upon Yield shall be credited to BFG in an amount equal to the cost of excess Raw Materials consumed as provided in Article IV, Section (h). If CEDAR exceeds the agreed upon Yield, then CEDAR will be paid by BFG an amount equal to one-half (1/2) the cost of the Raw Materials saved thereby.

(g) If, following good faith negotiations, the parties cannot agree upon the standard Yield and productivity to become Exhibit G at the end of the Scale-up Runs, this Agreement will automatically terminate and CEDAR will retain plant modifications. CEDAR will return to BFG BFG loaned equipment installed in connection with plant modifications hereunder.

(h) Nitrogen will be purchased by CEDAR that meets the specifications in Exhibit C. BFG will reimburse CEDAR for the actual cost of the nitrogen plus 5%. CEDAR will install a meter to account for the quantity of nitrogen utilized in the conversion process. CEDAR will work with BFG and review procedures and processes to minimize nitrogen usage. CEDAR will use its best efforts to obtain low cost nitrogen. BFG acknowledges that CEDAR has an existing nitrogen supply contract with Air Products until 1992 which sets this cost based on usage. CEDAR'S recent average cost of nitrogen is \$0.44 per 100 cubic feet and expectations are that this average cost will continue. In any event, CEDAR will charge BFG no more than \$0.55 per 100 cubic feet for nitrogen used by CEDAR in performing this Custom Manufacturing Agreement.

(i) CEDAR shall supply, at its own expense, all materials (other than Raw Materials, labels and packaging supplies), labor, energy, non-hazardous aqueous waste treatment, and handling which are necessary to convert Raw Materials into Product as aforesaid.

(j) CEDAR will dispose of wastes generated by the conversion process at a location approved by BFG. CEDAR will recommend a disposal site, be responsible for arranging transportation to the waste disposal site, and maintaining the required records of such disposal.

CEDAR will dispose of wastes generated under this Agreement only at waste disposal sites approved in advance by BFG, and BFG will pay for such disposal costs upon billing by CEDAR. For wastes created through the operational fault of CEDAR (i.e., off-specification, operator error, etc.), CEDAR will be responsible for the costs of such disposal. Such disposal sites must be approved in advance by BFG. CEDAR will work with BFG to optimize procedures to minimize waste generated.

(k) CEDAR shall perform, at its own expense, Raw Material quality control testing, in-process quality control testing, finished Product quality control testing, and waste material testing. The quality control testing procedures to be utilized shall be in accordance with Exhibit D which may be modified from time to time by mutual agreement. CEDAR shall provide written quality control reports demonstrating whether the Product meets the specifications of Exhibit A, concurrent with shipment of Product to BFG. CEDAR will provide all quality control testing equipment, with the exception of equipment necessary to perform Janda's Test. The equipment for Janda's Test will be loaned to CEDAR for the term of this Agreement, and will be returned to BFG at the termination of this Agreement. Title to this equipment, as listed in Exhibit E, will remain with BFG, and CEDAR will execute any financing statements or other documents necessary to give public notice of such ownership.

(l) Except as otherwise stated in this Agreement, CEDAR shall have the sole responsibility to provide suitable manufacturing equipment, personnel, and manufacturing practices capable of manufacturing Product from Raw Materials to meet the specifications of Exhibit A.

(m) CEDAR will provide warehouse space at CEDAR'S facility for storage of Raw Materials, including packaging supplies, for BFG's next scheduled production run. CEDAR will provide warehouse space to BFG at CEDAR'S facility for work in-process to enable CEDAR'S quality control testing to be completed. CEDAR will then certify that the finished Product

meets the specifications of Exhibit A, and CEDAR will deliver such Product to BFG at CEDAR'S warehouse. BFG will then transfer the Product to BFG's customers, or to an independent warehouse, at BFG's cost. CEDAR will provide best efforts in assisting BFG in developing a contract with a local public warehouse.

(n) BFG will, during the term hereof, initially loan two (2) pieces of equipment as described in Exhibit F to CEDAR, to be used solely in the conversion of Product for BFG. This equipment will be returned to BFG at the termination of this Agreement. Title to this equipment will remain with BFG, and CEDAR will maintain labels on the equipment indicating BFG's ownership. CEDAR will execute any financing statements or other documents necessary to give public notice of BFG's ownership interests. CEDAR grants to BFG a security interest in such equipment to the extent necessary to perfect BFG's ownership interest. CEDAR shall provide all routine maintenance that these two (2) pieces of BFG-owned equipment may require.

(o) CEDAR shall, with technical assistance from BFG, proceed with such prestart-up and start-up activities as may be approved in advance by BFG for the purpose of establishing the utility of the BFG technology in CEDAR'S plant. The cost for such studies, including the disposal of waste, shall be invoiced and paid as provided in ARTICLE IV.

(p) If the parties agree to make processing changes at any time during this Agreement, if these processing changes require the use of existing equipment already installed in CEDAR'S Unit 1 and identified in Exhibit H, there will be no additional conversion fee solely by reason of the use of such additional equipment. Plant modifications above and beyond those noted in Article IV will be reviewed for merit by both parties and paid for by the party that received the advantage of the modification or shared by both parties if the advantage is shared. If such changes result in the need for additional equipment in addition to Unit 1, BFG will loan such equipment to CEDAR, at no cost to CEDAR. Such additional equipment will be added to Exhibit F, and governed by the terms stated in Paragraph I(n) above.

## ARTICLE II - TERM OF AGREEMENT

The term of this Agreement shall be for an initial period of three (3) years, commencing on the date of execution of this Agreement. Year 1 commences on the day the Trial Run begins and is 12 months in length. This Agreement will continue thereafter from year to year, unless and until terminated by either party giving at least one (1) year's advance written notice, to be effective at the end of the initial three year period or any extended period.

## ARTICLE III - SCHEDULING

(a) BFG will give CEDAR a rolling one year forecast of its anticipated manufacturing requirements, revised monthly. CEDAR will produce Product ordered by BFG subject to the terms and conditions hereof.

(b) CEDAR will tentatively schedule BFG runs at 60 day intervals.

(c) BFG and CEDAR will communicate as necessary to keep each informed of schedule/demand status.

(d) Year 1 schedule is estimated at 6 runs. Year 2 schedule is estimated at 4-6 runs. Year 3 schedule is estimated at 4-6 runs.

(e) The duration of each run is estimated to be 10 days to 3 weeks, and will depend upon demand for Product.

## ARTICLE IV - FEES

(a) Minimums.

(i) BFG agrees to pay CEDAR a minimum of \$100,000 in Year 1, excluding nitrogen, plant modification, and waste disposal costs. This includes a minimum of \$70,000 for the first run only, and a minimum of \$100,000 thereafter for each additional run in Year 1.

- (ii) CEDAR will have the right to terminate this Agreement at the end of Year 1 unless thirty days prior to the end of Year 1, BFG makes a commitment to pay CEDAR a minimum of \$400,000 in Year 2, excluding nitrogen, plant modification, and waste disposal costs. This includes a minimum of \$100,000 per run.
- (iii) CEDAR shall have the right to terminate this Agreement at the end of Year 2, unless thirty days prior to the end of Year 2, BFG makes a commitment to pay CEDAR a minimum of \$600,000 in Year 3, excluding nitrogen, plant modification, and waste disposal costs. This includes a minimum of \$150,000 per run.

(b) **Trial Run and Scale-Up Runs.** For the Trial and Scale-up Runs, BFG will pay CEDAR a flat rate conversion fee of \$10,000 per day, with no per-pound additional fee.

This per diem charge will cover all processes necessary to convert Raw Materials to Product, including "Clean Up" and "Plant Preparation." "Clean Up" is defined as the time beginning when Product is completely drummed out of the reactor to the time the vessels have been cleaned. "Plant Preparation" is defined as time during which a substantial number of the operating and support staff are working on tasks specifically to prepare for a run. These tasks typically include: (1) operator training in the classroom during which operating and safety procedures are reviewed, (2) training in the production unit when the operational team simulates the production steps in the absence of the process chemicals, (3) calibration and testing of analytical instruments prior to commencement of production. Clean Up and Plant Preparation is estimated to take 1 to 1-1/2 days, but shall not take more than 3 days. CEDAR will use its best efforts to keep Clean Up and Plant Preparation to one day or less. It is expected that Plant Preparation and Clean up time will be reduced as experience is gained. For each Trial and Scale-up Run, CEDAR'S charge for Plant Preparation and Clean Up shall not exceed \$30,000 in Year 1 and shall not exceed \$15,000 in Year 2 and thereafter. The minimums for each run specified in Article IV(a) include Plant Preparation and Clean Up.

(c) Initial Commercial Runs. The first Scale-up Run that averages 20,000 pounds of Product per day for the run (excluding Clean up and Plant Preparation time) signifies two things: (i) the following run will begin the Initial Commercial Run phase and (ii) the conversion fee will change from a per diem to per pound of Product basis. The per pound conversion fee for the first Initial Commercial Run will be \$10,000 per day times the number of Production, Plant Preparation and Clean up days divided by the total pounds of Product produced during the final Scale-up Run. For purposes of charging production days, "Production Days" are defined as follows: the start of production is defined as the day when Raw Materials (DCPD) enter the reactor. The end of production is defined as the day when Product is completely drummed out of the reactor. Any scheduled delays in Clean Up and Plant Preparation will not be charged to BFG. Once the Initial Commercial Run phase has begun, only this dollar per pound conversion fee will be paid; no further per diem fees or charges (such as the \$15,000 per diem Plant Preparation and Clean up fee) will be paid. A mutually acceptable standard Yield along with the per pound conversion fee will be set forth in Exhibit G at that time. After each Initial Commercial Run, the average production rate will be calculated. The conversion fee and standard Yield will be recalculated as set forth above at the completion of each run and will be the rate charged to BFG for the next run. These recalculated conversion fees and standard Yields will be set forth in an updated Exhibit G.

(d) Commercial Runs. When an Initial Commercial Run averages 40,000 pounds of Product per day, or BFG and CEDAR agree practical productivity has been reached, the next run and succeeding runs will be Commercial Runs. The Commercial Run conversion fee will be based upon the Standard Yield and conversion fee established in the last Initial Commercial Run as set forth in Exhibit G. During the Commercial Run phase, both parties will continue to explore enhancements to productivity. BFG must give approval before any changes to the process are made. The cost reductions resulting from any enhancement to productivity will be shared 50/50 by the parties.

(e) BFG reserves the right to return to the per diem charge prior to any production run at any time during the term of this Custom Manufacturing Agreement.

(f) Process Changes. When BFG and CEDAR agree a significant process change has occurred, by mutual agreement the conversion fee will return to the per diem rate of \$10,000/day for that Trial Run. The conversion fee will return to a fee per pound of Product once CEDAR and BFG mutually agree the process is reproducible.

(g) Facility Modifications. BFG shall pay CEDAR its actual costs up to \$45,000 to modify the Facilities for the Trial Run, and its actual costs up to an additional \$75,000 to modify the Facilities for Scale-up and Commercial Runs. All of CEDAR'S Processing Unit 1 as defined in Exhibit H will be made available for all runs. Initial modifications for the Trial Run include one (1) 3,000 gallon and two (2) 1,500 gallon glass lined vessels plus surrounding lines, scrubbers, instrumentation, and Guilocutter installation. Scale-up and Commercial Runs modifications include two additional vessels (1 - 3,000 gallon and 1 - 1,500 gallon), molecular sieves, Panometric moisture analyzer installation, and a revised, more permanent Guilocutter installation. Drums, tote bins and/or tank trucks will be used for packaging the Product in Commercial Runs. This will be included in the per diem charge or per pound charge. BFG will be provided with a detailed account of proposed modifications for approval prior to those modifications being made. BFG payment to CEDAR will be made at the time modifications are completed.

(h) Invoices. CEDAR shall invoice BFG on a monthly basis. BFG shall pay all invoices on a net basis within 30 days of receipt of invoice. Such invoices shall include credits (or charges) to BFG for Yield adjustments to correct for any losses (or gains) as specified in Article I Section (f).



## ARTICLE V - CEDAR'S RESPONSIBILITIES

(a) CEDAR will make its best efforts to produce a total of 15,000 to 20,000 pounds of Product during the Trial Run.

(b) CEDAR will use its best efforts to begin the Trial Run on or before July 16, 1990, subject to BFG approval of necessary facility modifications in accordance with Article IV(g).

(c) CEDAR shall provide BFG a two week notice of the Trial Run and subsequent scheduled production. BFG shall have the right upon reasonable notice during normal business hours to have one or more representatives (including representatives of its customers) in CEDAR'S plant for any reason pertaining to this Agreement.

(d) CEDAR warrants Product made during the Initial Commercial and Commercial Run phases of the Agreement will meet the specifications of Exhibit A.

(i) Rework: Material produced during the Initial Commercial or Commercial Runs that does not meet the specifications of Exhibit A but can be reworked, will be reworked at a mutually accepted time at CEDAR'S expense and no per diem or per pound conversion, Clean Up or Plant Preparation fee will be charged for rework.

(ii) Scrap: Material produced during the Initial Commercial or Commercial Runs that does not meet the specifications of Exhibit A but cannot be reworked shall be disposed of by CEDAR at CEDAR'S expense consistent with applicable local, state and federal regulations. CEDAR will credit BFG for the cost of the Raw Materials going to such nonspecification product. CEDAR will not receive any per diem or per pound or Clean-Up or Plant Preparation fee for such nonspecification product.

(e) Customer Complaints:

Quality complaints will be evaluated by reference to samples from customer, CEDAR and

BFG. CEDAR shall provide all available processing and analytical information to BFG. Upon agreement by BFG and CEDAR that any complaint is valid and the responsibility of CEDAR, the returned goods shall be disposed of as per previously defined guidelines (i.e. rework, scrap, etc.). CEDAR shall credit BFG for any off-specification Products previously billed, including freight costs and all direct expenses of identification of the nonconforming Product.

(f) Record Keeping:

CEDAR shall maintain one copy of production records as required by good manufacturing practices. CEDAR shall supply a duplicate copy of such records to BFG no later than one week after manufacture of the Product.

(g) Quality Control Testing:

CEDAR will perform quality control testing in accordance with Exhibit D to assure that the finished Product conforms to the specifications listed in Exhibit A. CEDAR shall retain four (4) quart size samples of every lot, two (2) from the first drum and two (2) from the tenth drum. One of each of the samples shall be shipped to BFG, at BFG's cost, to be the permanently retained samples, the other sample will be retained at the Facility for a period of one (1) year. CEDAR shall not ship Product until the Product has been certified to BFG as meeting the specifications of Exhibit A.

(h) Insurance for Services Performed:

CEDAR shall be and remain during the term of this Agreement in compliance with the statutory requirements for worker's compensation and employer's liability insurance in a minimum amount of \$100,000 and, in addition, shall maintain comprehensive general liability, including contractual product liability and completed operation, and property of BFG in the care, custody and control of CEDAR, with a minimum combined limit of liability of not less than \$5 million per occurrence. The terms of coverage of such insurance shall be evidenced by certificates of insurance to be furnished by CEDAR to BFG, which certificates shall provide that

at least thirty (30) days written notice shall be given to BFG prior to expiration, cancellation or modification of any of the terms of coverage of any policy.

#### ARTICLE VI - TITLE AND RISK OF LOSS OF GOODS

(a) BFG shall at all times have sole title to the Raw Materials, packaging supplies, in-process materials and finished Product. CEDAR shall place prominent signs giving notice of BFG ownership in those places where BFG's goods are stored. To evidence BFG's ownership of Raw Materials, packaging supplies, in-process materials, and Product, CEDAR shall execute financing statements and such other documents as necessary to protect BFG's ownership of the Raw Materials and Product.

(b) CEDAR shall have all risk and liability for loss of or damage to the Raw Materials, packaging supplies, in-process materials, Product and BFG-owned equipment while in its custody and control, and including storage at CEDAR'S facility, but only to the extent such loss or damage does not result from BFG's negligence or that of any carrier nominated by BFG.

#### ARTICLE VII - AUDIT

BFG representatives shall have the right (i) to audit the production records of CEDAR, including laboratory testing records and procedures applicable solely to products produced for BFG, (ii) to physically inspect the conversion operation, and (iii) to physically inventory Raw Materials and Product in CEDAR'S possession at any time during normal business hours with reasonable notice. CEDAR agrees to provide adequate and appropriate labor and equipment to support such an audit and/or physical inventory.

#### ARTICLE VIII - SCHEDULING, DELIVERIES AND RECONCILIATION

(a) Product delivery schedules shall be as mutually agreed by the parties, it being the intent that such schedules shall substantially reflect the latest applicable schedule for Product deliveries specified by BFG and accepted by CEDAR.

(b) Deliveries of Raw Materials shall be made by BFG as required by CEDAR to enable it to comply with applicable Product delivery schedules.

(c) If, upon termination of this Agreement, CEDAR has in its possession Raw Materials supplied by BFG in excess of those quantities required to produce the quantities of Product to be delivered to BFG hereunder, CEDAR shall purchase such Raw Materials at a mutually agreed upon price or, if no price can be agreed upon, return such Raw Materials to BFG, F.O.B. facility.

#### ARTICLE IX - FAIR LABOR STANDARDS ACT

CEDAR hereby agrees that its conversion hereunder and all of its work in connection therewith shall be in accordance with all applicable requirements of the Fair Labor Standards Act of 1938, as amended, and agrees to so certify on its invoices.

#### ARTICLE X - FORCE MAJEURE

Neither party shall be liable for its failure to perform hereunder due to any occurrence beyond its reasonable control, including acts of God, fires, floods, wars, sabotage, labor disputes, governmental laws, ordinances, rules and regulations, and any other similar occurrence; provided, however, that obligations for and payment for Product produced and shipped shall not be relieved or suspended by any event of force majeure. The party whose performance is prevented by any such occurrence shall notify the other party thereof in writing as soon as is reasonably possible after the commencement of such occurrence, and shall promptly give written

notice to the other party of the cessation of such occurrence. The party affected by such occurrence shall use its best efforts to remedy or remove such event of force majeure as expeditiously as possible.

#### ARTICLE XI - OWNERSHIP OF TECHNOLOGY AND CONFIDENTIALITY

(a) Title to and ownership of all of the technology and information supplied by BFG to CEDAR hereunder shall remain in BFG. CEDAR shall have the right to use BFG's technology for the purposes of this Agreement; provided, however, that CEDAR'S right shall endure only for the term of this Agreement. After the term, CEDAR shall return to BFG all written documents relating to the technology, and all copies thereof, and shall cease any and all use of said technology.

(b) Further to subparagraph (a) above, with respect to all information which is disclosed to CEDAR, which information may include, but is not limited to, technology, manufacturing procedures, recipes, processing, marketing or customer information (collectively, the "BFG Information"), CEDAR agrees for itself and for its directors, officers, employees and representatives, to receive and hold in confidence and maintain secret each item of BFG Information which is disclosed to it by BFG or which is acquired as a result of any visit by its employees or representatives to a facility of BFG. CEDAR further agrees not to disclose any BFG Information to any third party nor use the same for the benefit of anyone other than BFG unless specifically authorized in writing by BFG. CEDAR agrees to limit the disclosure of BFG Information to those of its employees who have a need to know the information, and shall instruct such employees who obtain such confidential information that such information is not to be disclosed to or used for the benefit of a third party. CEDAR warrants that its employees having access to BFG Information have each executed a written agreement obligating them to maintain BFG's Information in confidence.

(c) During the term of this Agreement, CEDAR agrees to use BFG Information solely for the purposes of this Agreement and in performing services for BFG. It is understood that no other license to use BFG Information, or under any patent thereon, is hereby granted or implied to CEDAR. CEDAR shall not use any item or items of BFG Information to manufacture for or sell to any party Product or any variant of the Product. CEDAR agrees that if BFG believes that BFG Information is being misused or improperly disclosed by CEDAR, BFG will have the right to obtain a temporary restraining order, and/or an injunction, to protect BFG from the irreparable harm that will result from CEDAR'S breach of the terms of this Article XII.

(d) The confidentiality obligations stated above shall endure for a period of twenty-five (25) years from the date of termination of this Agreement.

(e) The obligations of secrecy and confidentiality stated in the above paragraphs shall not apply to information (i) which CEDAR can prove by written documents was already known to it at the time of disclosure to CEDAR and was not obtained directly or indirectly from BFG, (ii) which is public knowledge or becomes public knowledge or is published through no fault of CEDAR, or (iii) which is disclosed to CEDAR by a third party who is not under obligation to BFG with respect to such information. Specific information shall not be deemed to come under the above exceptions merely because it is encompassed by more general information within an exception, nor shall any combination of information be excepted merely because individual items of information in the combination are excepted.

#### ARTICLE XII - COVENANT NOT TO COMPETE

To protect further BFG Information, and as further consideration for BFG's entering into this Agreement, CEDAR hereby represents, warrants and covenants for itself, its directors, officers, agents, employees, successors and assigns as follows:

(a) CEDAR shall not compete with BFG in development, production, manufacturing, marketing or sales of polynorbornene RIM/RTM products both during and for a period of five (5) years after the termination of this Agreement;

(b) CEDAR shall not provide custom manufacturing services for polynorbornene products to other companies during the term of this Agreement.

#### ARTICLE XIII - DEFAULT

Subject to the provisions of ARTICLE X (Force Majeure), if either party hereto shall fail to perform or fulfill, at any time and in the manner herein provided, any obligation or condition required to be performed or fulfilled by such party hereunder, and if such party fails to remedy any such failure within sixty (60) days after receiving written notice thereof from the non-defaulting party, the non-defaulting party shall have the right to terminate this Agreement by giving written notice of immediate termination to the defaulting party.

#### ARTICLE XIV - WARRANTIES

(a) CEDAR warrants that Product delivered to BFG hereunder shall meet the specifications therefor set forth in Exhibit A.

(b) BFG warrants that each of the Raw Materials supplied by BFG to CEDAR hereunder shall meet the specifications set forth in Exhibit C.

#### ARTICLE XV - INDEMNIFICATION

(a) CEDAR shall indemnify, protect, defend and save harmless BFG, its agents and employees from and against any and all claims, demands, judgments or causes of action including costs and attorneys' fees by any party or parties whatsoever, including employees of

CEDAR, for loss, personal injury including death, or damage of any kind either to persons or property directly or indirectly arising out of the operations performed under this Agreement except such loss, damage or injury as is caused by the sole negligence of BFG. This indemnity shall impose liability on CEDAR only to the extent permitted by the laws of the state governing performance thereof and to the fullest extent permitted and any provision hereof not permitted by such laws is expressly deleted from this Agreement. The purchase of insurance by CEDAR with respect to the foregoing shall not be construed as a fulfillment or discharge of the obligations set forth in this section.

(b) BFG shall indemnify, protect, defend and save harmless CEDAR, its agents and employees from and against any and all claims, demands, judgments or causes of action including costs and attorneys' fees by any party or parties whatsoever, including consumers and customers and employees of BFG, for loss, personal injury including death, or damage of any kind either to persons or property directly or indirectly arising out of the marketing, sales and distribution of Product under this Agreement except such loss, damage or injury as is caused by the sole negligence of CEDAR or CEDAR'S failure to manufacture Product in accordance with the specifications of Exhibit A and be free from contamination.

#### ARTICLE XVI - NOTICES

All notices and reports shall be sent to the receiving party at:

If to CEDAR:

Cedar Chemical Corporation  
24th Floor  
5100 Poplar Avenue  
Memphis, Tennessee 38137  
Attn: Director of Custom Manufacturing



If to BFG:

The B.F. Goodrich Company  
9921 Brecksville Road  
Brecksville, OH 44141  
Attn: Mark Ackerman, Manufacturing Manager, Telene

With a copy to:  
Attn: Business Director, Telene (same address)

All notices to be given by either party to the other pursuant to any of the terms of this Agreement shall be forwarded by registered or certified mail, return receipt requested, and shall be deemed to have been given upon the date of the mailing thereof as shown on the Post Office receipt. Notices may also be given by first class mail and will be deemed given upon receipt. Either party may at any time direct in writing that particular notices or types of notices be delivered to specific designees other than those named herein.

#### ARTICLE XVII - MISCELLANEOUS

(a) To the degree that either party finds it convenient to employ their standard forms of purchase order or acknowledgement of order in administering the terms of this Agreement, it may do so, but none of the terms and conditions printed or otherwise appearing on such form shall be applicable except to the extent that it specifies information required to be furnished by either party hereunder.

(b) Any assignment of this Agreement by either party without the prior written consent of the other party shall be void.

(c) The terms and conditions hereof constitute the entire agreement between the parties hereto with respect to the subject matter hereof and supersede all previous communication, either oral or written, between the parties hereto. There are no understandings, representations or warranties of any kind whatsoever, except as expressly set forth herein. A failure to exercise any right hereunder with respect to any breach shall not constitute a waiver of such right with respect to any subsequent breach.

(d) The validity, interpretation and performance of this Agreement shall be governed by the laws of the State of Ohio.

(e) No amendment, modification or release from any provision hereof shall be of any force or effect unless it is in writing, signed by the party claimed to be bound thereby, and specifically refers to this Agreement.

IN WITNESS WHEREOF, the parties hereunto have caused this Agreement to be executed in duplicate as of the day and year first above written.

The B.F. GOODRICH COMPANY  
through its Speciality Polymers  
and Chemicals Division

By: John A. Weaver  
Name: John A. Weaver  
Title: Vice President

*MAA*  
*Bel*

CEDAR CHEMICAL CORPORATION

By: William J. Eissler Jr.  
Name: William J. Eissler Jr.  
Title: Vice President - Organic Chemicals

7034k/bh

RECEIVED

APR 8 1993

Ans'd.....

AMENDMENT AGREEMENT

THIS AMENDMENT AGREEMENT (the "Amendment") dated as of the 2nd day of July, 1992, by and between The B.F. Goodrich Company, a New York corporation, through its Specialty Polymers and Chemicals Division, having offices at 9911 Brecksville Road, Brecksville, Ohio 44141-3247 (hereinafter called "BFG") and Cedar Chemical Corporation, a Delaware corporation, having offices at 5100 Poplar Avenue, Memphis, Tennessee 38137 (hereinafter called "Cedar").

## W I T N E S S E T H:

WHEREAS, BFG and Cedar entered into a Custom Manufacturing Agreement dated as of the 2nd day of July, 1990 (the "Agreement") whereby Cedar undertook to produce DCPD co-monomer formulations ("Product") in accordance with the provisions of said Agreement for an initial term of three (3) years ending July 1, 1993; and

WHEREAS, the parties hereto desire to amend the terms of the Agreement and to extend the initial term of the Agreement at least one (1) additional year, all in accordance with the terms and conditions set forth in this Amendment.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

I. Extended Term.

The term of the Agreement is hereby extended for a period of one (1) year ending June 30, 1994. The Agreement will continue thereafter from year to year, unless and until terminated by either party giving written notice to the other at least one (1) year

EXHIBIT

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prior to the then current expiration date of the Agreement, as amended, or unless terminated as otherwise provided herein (the "Extended Term").

## **II. Parties' Obligations.**

During the Extended Term, Cedar shall continue to produce Product at its Facility from Raw Materials supplied by BFG, and BFG shall continue to pay Cedar for its services, all in accordance with the terms and conditions of the Agreement except to the extent that such terms and conditions shall be expressly modified by this Amendment; it being understood that Cedar will schedule at least one (1) production campaign per quarter beginning on such dates and for such quantities as shall be requested by BFG during the Extended Term, provided that, at least sixty (60) days prior to the initial date of each such campaign, BFG shall have delivered to Cedar its firm written order for the Product to be produced during such campaign. It is further agreed that, in order to assist Cedar in its production planning, BFG will provide Cedar with tentative rolling one (1) year forecasts of its anticipated quarterly requirements of Product, which forecasts it will revise at least quarterly. Cedar will make its best efforts to meet BFG's requests for production campaigns in addition to the quarterly campaigns planned hereunder subject to Cedar's other scheduling commitments.

## **III. Production Rate and Target Unit Costs.**

(a) In an effort to maximize Cedar's rate of production of Product, BFG has heretofore requested that Cedar modify the Facility in accordance with specifications provided by BFG, and BFG

may request other such modifications of the Facility during the term of the Agreement (which modifications are in addition to the costs of Facility modifications contemplated in Article IV (g) of the Agreement). Cedar has undertaken and will in the future undertake any such modifications requested by BFG to which it has no reasonable objection, in accordance with mutually agreed construction schedules. The cost of all such modifications previously requested by BFG shall be for BFG's account. Allocation of the cost of any such future modifications on which the parties shall agree shall be determined in accordance with the provisions of Article I(p) of the Agreement.

(b) Cedar acknowledges its undertaking to make its best reasonable efforts, using the technology and Raw Materials supplied by BFG, to produce Product for BFG hereunder at an average conversion fee of approximately \$.25 per pound by the middle of the fourth (4th) contract year (July 1, 1993 to June 30, 1994). BFG acknowledges its undertaking to cooperate with Cedar in an effort to minimize Cedar's plant preparation and clean out costs incurred hereunder.

(c) In addition to the plant modifications referred to above, BFG shall reimburse Cedar's actual costs of installing a new fume hood for the gel testing system in Cedar's laboratory at the Facility, such costs not to exceed \$29,325, due and payable by BFG upon its receipt of a statement from Cedar certifying completion and attaching reasonably detailed documentation of Cedar's costs.

#### IV. Fees and Expenses.

(a) In addition to the conversion fees specified in the Agreement, BFG shall pay the following additional fees, which shall be invoiced monthly by Cedar and paid by BFG in accordance with the payment terms specified in the Agreement:

(1) In consideration of Cedar's increasing the number of operators directly engaged in the production of Product for BFG hereunder from two (2) to three (3) operators per shift and increasing the number of day operators from one (1) to two (2), BFG shall pay Cedar an incremental fee (in addition to the conversion fees referred to herein) of \$550.00 per day for each day of production of Product.

(2) In consideration of the additional expense incurred by Cedar in performing laboratory tests using the Gusmer Unit, as identified in Exhibit A attached hereto (in addition to those other laboratory tests contemplated by the Agreement and identified in Exhibit B attached hereto) BFG shall reimburse Cedar \$250.00 per day for each day of production of Product, to be billed monthly and payable as aforesaid. It is understood, however, that with respect to production campaigns of more than three (3) weeks, the parties will make other mutually satisfactory arrangements to carry out the testing contemplated hereunder, with the incremental cost thereof for BFG's account, it being recognized that the utilization of lab operator overtime services by Cedar to

carry out such testing is not feasible in production campaigns of more than three (3) consecutive weeks.

(b) The conversion fees and plant preparation and clean out fees specified in the Agreement, together with the incremental fees identified hereinabove, shall be subject to escalation or de-escalation effective July 1, 1993, and annually thereafter, upon notice by Cedar to BFG based on the following formula:

1.  $.53 \times$  (percentage increase or decrease in average hourly rate for plant employees - May 1, 1992 - May 1, 1993 and May 1 of each subsequent contract year); plus
2.  $.06 \times$  (percentage increase or decrease in electric rate - May 1, 1992 - May 1, 1993 and May 1 of each subsequent contract year); plus
3.  $.03 \times$  (percentage increase or decrease in the gas rate - May 1, 1992 - May 1, 1993 and May 1 of each subsequent contract year); plus
4.  $.38 \times$  (percentage increase or decrease in the consumer price index - May 1, 1992 - May 1, 1993 and May 1 of each subsequent contract year).

Cedar shall provide BFG with reasonable documentation of such cost escalation or de-escalation in order to permit BFG to verify the corresponding increases or decreases in fees payable hereunder.

V. Minimum Annual Fees.

(a) In addition to the parties' rights to terminate the Agreement in accordance with the provisions of Article I hereof, Cedar shall have the right, upon notice to BFG, to terminate the Agreement at the end of the third (3rd) contract year, effective June 30, 1993, unless, thirty (30) days prior to the end of such third (3rd) contract year, BFG commits to pay Cedar a minimum of \$700,000 in conversion fees (in addition to the incremental fees referred to herein) during the fourth (4th) contract year (July 1, 1993 - June 30, 1994), subject only to Cedar's ability to produce Product ordered by BFG hereunder during such contract year. Thereafter, in the event that the term of the Agreement is extended for additional contract years in accordance with the provisions of Paragraph 1 of this Agreement, the minimum fees payable by BFG shall increase in the amount of \$100,000 in each subsequent contract year up to the sum of \$1,000,000 in the event that the term is extended to a seventh (7th) successive contract year. Cedar shall have the right to terminate the Agreement at the end of any such contract year unless, thirty (30) days prior to the end of such contract year, BFG makes a commitment to pay Cedar the minimum amount of conversion fees specified in the preceding sentence applicable to the next successive contract year.

(b) It is further agreed that the minimum conversion fees payable to Cedar by BFG for each production campaign hereunder during the Extended Term shall be \$150,000.



IN WITNESS WHEREOF, the parties have caused this  
Amendment to be executed, in duplicate, as of the day and year  
first above written.

THE B.F. GOODRICH COMPANY,  
through its Specialty Polymers  
and Chemicals Division

CEDAR CHEMICAL CORPORATION

*BLS  
HLS*  
By: *John A. Weaver*  
Title: *Vice President Specialty Plastics*

Date: *April 2, 1993*

By: *Jeffrey L. Rat*  
Title: Director of Custom  
Manufacturing

Date: March 17, 1993

## SECOND AMENDMENT AGREEMENT

THIS AMENDMENT AGREEMENT (the "Amendment") dated as of the 1st day of July, 1997, by and between The B.F. Goodrich Company, a New York corporation, through its Specialty Chemicals Division, having offices at 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (hereinafter called "BFG") and Cedar Chemical Corporation, a Delaware corporation, having offices at 5100 Poplar Avenue, Memphis, TN 38137 (hereinafter called "Cedar").

### W I T N E S S E T H:

WHEREAS, BFG and Cedar entered into a Custom Manufacturing Agreement dated as of the 2nd day of July, 1990 (the "Agreement"), as amended by Amendment Agreement dated as of the 2nd day of July, 1992, (the "First Amendment") whereby Cedar undertook to produce DCPD Co-Monomer Formulations ("Product") in accordance with the provisions of said Agreement for a term which, pursuant to prior notice from Cedar to BFG in accordance with provisions of the Agreement, ended effective June 30, 1997; and

WHEREAS, by letter agreement dated June 9, 1997 (the "Letter of Intent"), BFG proposed that the parties negotiate a new definitive agreement which would have reinstated and extended the term of the Agreement for production of additional quantities of Product for BFG during the second half of 1997, in accordance with the terms and conditions of the Agreement, and for additional quantities in 1998 and at BFG's option in 1999, at prices specified in the Letter of Intent; and

EXHIBIT

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WHEREAS, BFG in its said Letter of Intent committed to reimburse certain capital expenditures totaling approximately \$100,000 incurred by Cedar at BFG's request in the event the parties were unable to negotiate a new definitive agreement for production of Product for BFG for an extended term at least through 1998; and

WHEREAS, pursuant to the aforesaid Letter of Intent, Cedar continued its production campaign pursuant to the terms of the Agreement for an extended term ending on or about November 15, 1997; and

WHEREAS, the parties now desire to reinstate and amend the terms of the Agreement and to further extend the term thereof three (3) additional calendar years (each such calendar year being sometimes referred to herein as a "Contract Year") beginning January 1, 1998 and ending December 31, 2000, all in accordance with the terms and conditions set forth in this Amendment.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

I. Extended Term: The term of the Agreement is hereby extended beginning as of January 1, 1998 and ending December 31, 2000 (the "Extended Term"). The Extended Term of the Agreement will continue thereafter from year to year unless and until terminated by either party upon one (1) year's advance written notice; provided, however, that any such extended term shall be subject to the condition that the parties shall have reached

written agreement at least one (1) year prior to the then current expiration date of the Agreement as to the minimum and maximum quantities of Product to be produced in such extended Contract Year (e.g., if the term of the Agreement is to be extended for the calendar year 2001, the parties must agree on the minimum and maximum quantities by no later than December 31, 1999).

II. Quantities: BFG forecasts that it will require the following quantities of Product to be produced by Cedar hereunder in each of the Contract Years during the Extended Term hereof as follows:

1998 - 8,250,000 pounds

1999 - Between 7,000,000 and 10,000,000 pounds

2000 - Between 7,000,000 and 12,000,000 pounds

During the Extended Term, Cedar shall produce Product meeting the specifications attached hereto as Exhibit A (hereinafter "Product") at its Facility from Raw Materials supplied by BFG and BFG shall order its entire requirements of Product from Cedar (except for any quantities produced by BFG in its own facilities or if volumes required by BFG exceed Cedar's capabilities to produce such quantities within the periods specified herein, provided that Cedar shall nevertheless have a first right of refusal to supply such additional quantities) and shall pay Cedar for its services hereunder, all in accordance with the terms and conditions of the Agreement, except to the extent that such terms and conditions are expressly modified by this Amendment.

Subject to the terms and conditions hereof, BFG orders from Cedar and Cedar shall make its best efforts to manufacture for BFG in a single, uninterrupted production campaign, commencing on or about June 1, 1998 and concluding no earlier than October 1 and no later than November 1, 1998, 8,250,000 pounds of Product. In each subsequent Contract Year, Cedar shall reserve the Facility and manufacture Product for BFG hereunder in at least one (but no more than two) uninterrupted production campaign(s) totaling not more than six (6) months during each such Contract Year, commencing on or about the first day of May, 1999 in the second Contract Year and, in each subsequent Contract Year, commencing on such date or dates as the parties may agree, and continuing for such period or periods as shall be sufficient for Cedar to produce that quantity of Product ordered by BFG for production in such Contract Year, in each case consistent with those quantities forecast by BFG hereinabove. Cedar's undertaking to produce such quantities of Product for BFG in each such Contract Year is subject to its receipt of BFG's firm purchase order no later than the 31st of December of the immediately preceding Contract Year, and is further subject to the terms and conditions applicable to scheduling of production of Product hereunder set forth in Paragraph III of this Amendment. Cedar's obligations hereunder are also at all times conditional upon BFG's delivery of DCPD of sufficient quality and in sufficient quantities to enable Cedar to produce Product therefrom in uninterrupted campaigns, utilizing BFG's process and

in accordance with the conditions identified in Exhibit B attached hereto.

III. Scheduling: At the end of each of the first three calendar quarters during each Contract Year during the Extended Term, BFG will give Cedar its forecast range of the anticipated quantities of Product which it will require in the next succeeding Contract Year, and the date or dates on which it will require Cedar to initiate production campaigns during such Contract Year. The quantity of Product to be ordered by BFG for production in any Contract Year following the First Contract Year shall not vary by more than ten percent (10%) of the average (mid-point) of its third quarter forecast delivered to Cedar for such Contract Year, (e.g., if BFG's September 30, 1998 forecast for 1999 requirements is 7,000,000 to 10,000,000 pounds, its purchase order shall not be less than 7,650,000, nor more than 9,350,000 pounds.) Until such time as Cedar shall receive BFG's firm order for Product, Cedar shall be entitled to commit the Facility to the production of products for other customers to the extent such commitments would not interfere with the scheduling of production of Product in accordance with BFG's then current forecast, it being understood that the fees payable by BFG hereunder are based on Cedar's ability to utilize the Facility for production of products for other customers for at least six (6) months during each Contract Year. On or before December 31, 1998 and on or before December 31 of each subsequent Contract Year, BFG shall issue its firm purchase order for the exact quantity of Product to be manufactured by Cedar in

the succeeding Contract Year in accordance with the terms hereof, and immediately thereafter the parties shall discuss and agree upon the targeted start-up date or dates for such campaign(s), consistent with such other contractual commitments which Cedar shall have entered into with respect to production of products in the Facility for other customers, and consistent with BFG's forecast quantities and start-up dates, provided that such forecasts do not unreasonably impede Cedar's ability to utilize the Facility for other customers for not less than six (6) months during each Contract Year, as aforesaid.

IV. Process Changes And Equipment Modifications: Prior to start up of the 1998 production campaign, Cedar shall have employed and trained additional employees in order for it to satisfy the operational and maintenance requirements and conditions outlined in Exhibit B attached hereto and Cedar shall make its best efforts to ensure that the minimum number and experience level of operators as outlined in Exhibit D shall be maintained. Cedar shall also have implemented a capital improvement program at the Facility described in Exhibit C attached hereto, estimated to cost approximately \$400,000 (the "Capital Improvements"). The cost of the Capital Improvements to be installed by Cedar hereunder shall be documented and furnished to BFG by not later than June 1, 1998. Cedar's cost of implementing the Capital Improvements shall be amortized based on the estimated quantities of Product to be manufactured hereunder during the three (3) year Extended Term of this Agreement 26,250,000 pounds at an estimated rate of amortization of \$.015

(1.5 cents) per pound. In the event that the Agreement, as amended hereby, is terminated prior to December 31, 2,000 for any reason other than Cedar's breach of the terms hereof, BFG shall reimburse Cedar the unamortized cost of the Capital Improvements promptly following the effective date of such termination. Such reimbursement shall be in addition to any other fees, costs or damages to which Cedar may be entitled as a result of such termination.

V. Fees. In addition to the Plant preparation and clean-out fee of \$22,500 per production campaign, in each case payable by BFG to Cedar thirty (30) days following the end of each such campaign, Cedar shall invoice BFG monthly during such campaign, and BFG shall pay within thirty (30) days of date of invoice an interim conversion fee of \$15,000 per day for each twenty-four (24) hour Production Day. A Production Day shall be any day on which Cedar has scheduled production of Product ordered by BFG in accordance with the terms hereof. Subject to BFG's compliance with its obligations hereunder, and subject to the conditions set forth in Exhibit B attached hereto, it is agreed that the final conversion fees payable by BFG hereunder in any Contract Year shall be \$.25 per pound for Product produced in any Campaign at a rate of less than 60,000 pounds per day and \$.20 per pound for Product produced in any Campaign at a rate of more than 75,000 pounds per day, it being agreed that, in no event will the conversion fee exceed \$.25 or be less than \$.20 per pound of Product produced for BFG in such Contract Year. The parties shall determine the amount of any



required adjustments to the interim conversion fees and shall make final payment and settlement of the final conversion fees due hereunder within thirty (30) days following the end of the production campaign in the First Contract Year and within thirty (30) days following the end of each production campaign in any subsequent Contract Year in which the conversion fee is based on a per diem rather than a per pound price. It is also agreed that, at BFG's election at the time it places its firm order for Product to be produced in any Contract Year following the first Contract Year, the final conversion fee shall be based on a unit cost per pound of Product equal to the actual calculated unit cost of Product produced hereunder in the immediately preceding Contract Year, but in no event less than twenty cents (\$.20) per pound. Such unit cost conversion fee shall be determined by dividing the total number of pounds of Product produced in the immediately preceding Contract Year into the aggregate conversion fees paid during such Contract Year. Such unit cost conversion fee so elected by BFG shall be the maximum conversion fee payable by BFG in the subsequent Contract Year, subject to compliance with the conditions imposed upon BFG set forth in Exhibit B attached hereto. The applicability of unit cost conversion fees in lieu of per diem fees is conditional upon BFG's continued compliance with its obligations hereunder and subject to the conditions set forth in Exhibit B attached hereto. It is further agreed that Cedar with the cooperation of BFG shall make its best efforts to reduce the conversion fees payable by BFG for Product produced hereunder below

\$.25 per pound, provided that, anything else herein to the contrary notwithstanding, Cedar's unit cost conversion fee shall in no event be less than \$.20 per pound of Product. The said per diem conversion fee, the minimum and maximum unit conversion fees and the Plant preparation and clean-up fee payable by BFG hereunder during the 1998 Contract Year shall escalate or de-escalate in each subsequent Contract Year hereunder in accordance with the formula set forth in Paragraph IV of the First Amendment to the Agreement dated as of July 2, 1992, except that the base rates applicable to the average hourly rate for Plant employees; electric rate; gas rate; and consumer price index shall be those in effect as of October 1, 1997, as compared to said rates in effect as of October 1 of each succeeding Contract Year. The provisions of Article V Fees of this Second Amendment supersede in their entirety the provisions of Article IV of the original Agreement and Articles IV and V of the First Amendment thereto.

VI. Other. Except to the extent set forth in this Amendment, the terms and provisions of the Agreement shall continue in full force and effect during the Extended Term.

EXECUTED by the parties as of the date first above appearing.

THE B. F. GOODRICH COMPANY

BY: 

DATE: 2/11/98

CEDAR CHEMICAL CORPORATION

BY: 

DATE: January 30, 1998

## EXHIBIT A

### Specifications:

#### Fast "A" component - 1100 FA

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (30°C)	30 sec's	25 sec's	40 sec's
Exo Time (30°C)	87 sec's	70 sec's	111 sec's
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

#### "B" components - 1100B, 1100BK,

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (30°C)	30 sec's	25 sec's	40 sec's
Exo Time (30°C)	87 sec's	70 sec's	111 sec's
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

#### "B" components - 1100EBK (Export mtl only)

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (30°C)	30 sec's	25 sec's	36 sec's
Exo Time (30°C)	87 sec's	70 sec's	100 sec's
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

#### Slow "A" component - 2100SA

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (40°C)	2.0 mins	1.5 mins	2.5 mins
Exo Time (40°C)	4.7 mins	3.7 mins	6.2 mins
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

#### Slow "A" component - 1100MA

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (40°C)	75 sec's	60 sec's	90 sec's
Exo Time (40°C)	200 sec's	160 sec's	240 sec's
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

"B" component - 2100EB, 2100EBK

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Gel Time (40°C)	2.0 mins	1.5 mins	2.5 mins
Exo Time (40°C)	4.7 mins	3.7 mins	6.2 mins
Delta T	>185°C	180°C	
Flash Point °F	>100°F	>100°F	
Viscosity	375 cps	300 cps	450 cps
Oxidation Products	0 ppm	0 ppm	50 ppm

For all products

	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>
Trimer level	8.5%	7.5%	9.5%
Headspace Oxygen (All reactors)	0 ppm	0 ppm	<100 ppm

# EXHIBIT B

## BFG 1998 CAMPAIGN NEEDS

Goal: 7.5 Million +/- 10% equivalent pounds of Telene.

### Assumptions:

- Based on "fast A" production with maximum 15% "slow A" included in total.
- DCPD quality provided has a CpK of 1.33 or greater to eliminate gel time adjustment.
- Raw material is provided and equally spaced to meet a 3 month production run.
- Zero out of date raw materials
- Zero out of spec raw materials
- Zero experiments
- Zero special request material

### Process Changes

- Eliminate in-process "B" gel test
- Utilize new equipment provided as part of new custom project
- Modify R-1105 purge
- Utilize inline mixers to transfer feed blend.

### Equipment Changes (cost estimate \$400M)

- See Exhibit C

### Operational Issues

- Additional training in May
- Lead Operator dedicated to control room
- Optimization of control systems

### Maintenance issues

- Dedicated mechanics on days
- Two mechanics on call with pagers
- Resolution of repeat equipment failures

### Tracking issues

- Asset effectiveness monitoring model

# EXHIBIT C

## 1998 TELENE HARDWARE UPGRADES

### ITEM

- 1) Run vacuum line from R1112 to VP-1407B (75' 2" cs sch 40)
- 2) Run trimer circulation loop R1113 to P1102 & E1102 (100' 2" ss sch 40 insulated)
- 3) Run DCPD line to R1113 (50" steam traced insulated 2" SS sch 40)
- 4) 4" vapor line from R-1114 to E-1305A (30' cs or ss.)
- 5) 2" DCPD line to R-1114 (40' ss sch 40 heat traced and insulated)
- 6) 2" Product line from R1107 to R-1112 (40' ss sch 40)
- 7) 2" Product line from R1112 to R-1107 (40' ss sch 40)
- 8) New rubber slide & purges lines & flow meters on R-1105 (cs & PTF)
- 9) Run a product line from P-1105 to R1114 (60' 2" ss sch 40 welded)
- 10) 2-4 gal bag filters for R-1105 (cs or ss)
- 11) Move EPAC/DEAC charge lines
- 12) Plumb a line from P-1105A&B to R-1106 (100' 2" ss sch 40 welded insulated)
- 13) Heat tape and re-insulate V-1106 (100' heat tape)
- 14) New bag filters on R-1114 & R-1107. Total of 4 new filter housings.
- 15) Heat tape on knock out pots
- 16) 3-30 gal ss dispensing tanks.
- 17) Silica tetrachloride tank.
- 18) 3-50 gal/min centrifugal or Viking packout pumps.
- 19) Scrubber backup pump (150 gal/min 30hp)
- 20) Protection for vacuum pumps.
- 21) Replace old heat tape and insulation on DCPD lines (150')
- 22) Back up for P-1102
- 23) Run 2" product line from R-1114 to the packout station (40' sch 40 ss)
- 24) Flash tester for Unit One
- 25) Gusmer back-up
- 26) Rebuild Packout Building (39x30 sheet metal building)
- 27) Oxygen sensors on all reactors
- 28) Hood for drum filling
- 29) Automate drum filling

## **EXHIBIT D**

### **STAFFING REQUIREMENTS**

- Minimum 4 operators per shift ( 1 lead operator and 3 operators).
- 4 lead operators for the run, 4 shifts (2 out of 4 experienced in Telene production).
- Maximum 1 operator per shift without Unit 1 experience (around 2-3 months).
- Lead operator and Senior operator computer literate.
- Systems in place to insure full staffing at all shifts.

PRATT/BFGOOD/TELEXHDOC

AB0000083699/

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**APT, LLC**

**Limited Liability Company Agreement  
(Member-Managed)**

**Organized Under the Delaware Limited  
Liability Company Act**

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**Signature Page**

**Schedule A – Basic Company Information**

**Schedule A-1 – Capital Contribution by Advanced Polymer Technologies, L.L.C.**

**Schedule A-2 – Capital Contribution by The B.F.Goodrich Company**

**Schedule B – Ancillary Agreements**

## Limited Liability Company Agreement (Member-Managed)

This Limited Liability Company Agreement (the "**Agreement**") evidences the mutual agreement of the Members (as defined below) in consideration of their contributions and promises each to the other, for the purpose of forming a limited liability company pursuant to the Delaware Limited Liability Company Act, Del. Code Ann. title 6, §§18-101 *et. seq.*, as the same may be amended from time to time (the "**Act**").

### ARTICLE I ORGANIZATIONAL MATTERS; DEFINITIONS

1.1 Name. The name of the limited liability company formed hereunder (the "**Company**") is the name stated on the cover page of this Agreement.

1.2 Effective Date; Term. This Agreement shall become effective on the date that an executed copy of the certificate of formation required by §18-201 of the Act ("**Certificate**") shall have been filed in the office of the Secretary of State of Delaware, and the term of existence shall be perpetual, unless earlier terminated pursuant to the provisions of this Agreement.

1.3 Registered Office; Place of Business; Agent. The address of the registered office of the Company as required by §18-104 of the Act and the principal place of business of the Company (which may but need not be the same as the registered office) shall be as indicated on Schedule A attached hereto. The Manager may establish additional offices or places of business of the Company or enter into such contracts or hire such agents in such other locations, inside and outside of the State of Delaware, as it deems necessary or desirable in the conduct of the business of the Company. The agent of the Company for service of process, as required by §18-104 of the Act, shall be as indicated on Schedule A.

1.4 Definitions. Capitalized terms used in this Agreement shall have the meanings as defined throughout the text of this Agreement. A list of such definitions is contained in Section 13.1.

### ARTICLE II PURPOSE

2.1 Purpose. The purpose of the Company is to carry on any lawful business or activity related to the development, manufacture, marketing and sale of various catalysts and of dicyclopentadiene (DCPD)-based polymers, monomers and products made therefrom and the licensing of ruthenium and other catalyst-related technology, as approved by the Board of Directors from time to time (the "**Business**").

## ARTICLE III MEMBERS

3.1 Members. The members of the Company ("**Members**") shall be those persons or entities identified as such on Schedule A, as such Schedule shall be amended from time to time. The names and addresses of the Members, the amount of their contribution to the capital of the Company, the number of Units credited to each Member and their Percentage Interests are set forth in Schedule A.

3.2 Additional Members. The Members may admit additional Members to the Company as provided in this Agreement. The transferee of the interest in the Company of an existing Member shall not become a Member until admitted as a substituted Member pursuant to Section 8.5.

3.3 Non-Competition; Non-Disclosure.

(a) Advanced Polymer Technologies, L.L.C. agrees that, during the term of this Agreement, and for a period of ten (10) years thereafter, it and its Affiliates (as defined below) shall not engage, directly or indirectly, in the Business anywhere in the world.

Notwithstanding the foregoing, the restriction set forth above shall not limit the right of Advanced Polymer Technologies, L.L.C. or its Affiliates (as defined below), pursuant to the separate license agreement dated the date hereof, to license to and/or receive the financial benefit from the technology contributed by it hereby or any derivative thereof to APT Aerospace for use as fuel, fuel cells, fuel tanks, rocket housings, or other parts in the aerospace industry.

For purposes of this Agreement, an "**Affiliate**" of The B.F. Goodrich Company ("**BFG**") is a person that directly, or indirectly through one or more intermediaries, controls the management or policies of BFG or is controlled by, or whose management or policies are controlled by, or is under common control with BFG.

For purposes of this Agreement, an "**Affiliate**" of Advanced Polymer Technologies, L.L.C. means:

(i) any person who directly or indirectly owns, controls or holds the power to vote any of the outstanding voting securities or membership interests in Advanced Polymer Technologies, L.L.C. or in any of the members of Advanced Polymer Technologies, L.L.C. or their respective members or owners;

(ii) any person who directly or indirectly is owned, controlled or held by Advanced Polymer Technologies, L.L.C. or by any of the members of Advanced Polymer Technologies, L.L.C. or their respective members or owners; or

(iii) any officer, partner, shareholder, member, or director of any of the persons described above;

provided, however, that California Institute of Technology shall not be deemed to be an Affiliate of Advanced Polymer Technologies, L.L.C.

(b) BFG agrees that, during the term of this Agreement, and for a period of ten (10) years thereafter, it and its Affiliates shall not engage, directly or indirectly, in the Business anywhere in the world.

Notwithstanding the foregoing, the restriction set forth above shall not limit the right of BFG and its Affiliates to manufacture, distribute, market, sell or otherwise use products based on technology retained by BFG or any of its Affiliates including, without limitation (A) DCPD-based products as covered by the former Telenor joint venture without further expansion of its territories or to comply with its existing obligations in Asia; and (B) polynorbornene-based products in any industry anywhere in the world, including without limitation, products for the electronics or electronic materials industry anywhere in the world.

(c) The Members agree that the geographical, time and subject matter limitations of this covenant not to compete are properly required for the adequate protection of the property being contributed and that in the event that any such geographic, time or subject matter limitation shall be deemed to be unreasonable or otherwise invalid or unenforceable for any reason, in a final, non-appealable order by a court of competent jurisdiction, then, it is intended by the Members that such part shall be enforceable to the maximum extent permitted by law, and such restriction shall be deemed to have been so written.

(d) The Members acknowledge that they have had or have been given access to confidential information of each Member and confidential information concerning the Company or the technology contributed to it which, if known to competitors of the Members or the Company, would damage the business and operations of the Members or the Company.

Advanced Polymer Technologies, L.L.C. agrees that it shall not, and its Affiliates shall not, divulge or appropriate any Confidential Information (as defined below) of or relating to the Company or its assets or BFG to their own use, or to the use of any third person, anywhere in the world. Nothing in this Agreement shall be deemed to prohibit or restrict Advanced Polymer Technologies, L.L.C. or its Affiliates or Nelson D. Abell from using the Confidential Information of or relating to Advanced Polymer Technologies, L.L.C. in connection with their activities involving fuel, fuel cells, fuel tanks, rocket housings, or other parts in the aerospace industry.

BFG agrees that it shall not, and its Affiliates shall not, divulge or appropriate any Confidential Information of or relating to the Company or its assets or Advanced Polymer Technologies, L.L.C. to their own use, or to the use of any third party, anywhere

in the world. Nothing in this Agreement shall be deemed to prohibit or restrict BFG or its Affiliates from using (x) the Confidential Information whether of or relating to the Company, its assets, BFG or Advanced Polymer Technologies, L.L.C. to provide service to BFG's European Telene customers; (y) the Confidential Information of or relating to BFG in order to comply with their existing obligations in Asia; or (z) the Confidential Information of or relating to BFG in order to engage in the manufacture, distribution, marketing, selling or other use of polynorbornene-based products for any industry anywhere in the world.

As used herein, the term any "**Confidential Information**" means the following oral or written information of the Company: know-how, technology, inventions, designs, methodologies, trade secrets, patents, secret processes and formulae, information and data relating to the development, research, testing, manufacturing, marketing, sale, distribution and use of products, sources of supplies, budgets and strategic plans, and the identity and special needs of customers; provided that the term "Confidential Information" shall not include (i) any such information that is in the public domain or generally known or available to customers, suppliers or competitors of the Company through no breach of the provisions of this Section 3.3 or other non-disclosure covenants; (ii) any such information that is rightfully in the receiving third party's possession, without violation of the provisions of this Section 3.3 or other non-disclosure covenants; and (iii) any such information that was independently developed by the receiving third party without violation of the provisions of this Section 3.3 or other non-disclosure covenants.

(e) The Members agree that in the event of breach of or default by either Member of either the covenant not to compete or the covenant not to disclose Confidential Information (both as set forth in Section 3.3(b) and (d) above), the Company shall be entitled, if it so elects, to institute and prosecute proceedings in any court of competent jurisdiction, either in law or equity, to obtain damages for such breach. Notwithstanding the preceding sentence, the Members acknowledge and agree that the breach by either Member of the covenants not to compete and not to disclose Confidential Information contained in this Section 3.3 would cause irreparable injury to the Company and that the remedy at law for any such breach may be inadequate, and the Members agree and consent that, in addition to any other available remedy, temporary and permanent injunctive relief may be granted in any proceeding which may be brought by the Company to enforce such covenants without necessity of proof that any other remedy at law is inadequate. No bond or, if one is required by law, a bond only nominal in amount shall be required by the Member bringing the action.

3.4 Limitations on Members. No Member shall have the right:

(a) To control the Company business or to sign for or to bind the Company, except to the extent specifically provided in this Agreement;

(b) To have its capital contribution repaid, except to the extent provided in this Agreement;

(c) To withdraw from the Company, except to the extent provided in this Agreement;

(d) To require partition of Company property or to compel any sale or appraisal of Company assets or sale of another Member's interest therein, except as provided in Article X of this Agreement; or

(e) To sell or assign its interest in the Company, except as provided in Article VIII hereof.

3.5 Other Limitations. Unless authorized to do so by this Agreement, neither the Members of the Company, nor the Manager (as defined below), nor any officer, employee, attorney-in-fact, nor other agent of the Company shall have any power or authority to bind the Company in any way, to pledge its credit or to render it liable pecuniarily for any purpose. No Member shall have any power or authority to bind the Company unless the Member has been specifically authorized by the Board of Directors (as defined below) to act as an agent of the Company, in accordance with the previous sentence.

3.6 Non-Solicitation.

(a) When used in this Agreement, the term "**Solicitation**" shall mean recruiting, soliciting or inducing of any nonclerical employees of a Member or Affiliates to terminate their employment with, or otherwise cease their relationship with, the Member or its Affiliates, or hiring or assisting another person or entity to hire any nonclerical employees of a Member or its Affiliates or any person who within six (6) months before was such an employee.

(b) During the term of this Agreement, neither Member shall engage in any Solicitation without the prior written consent of the other Member.

(c) The Members agree that the geographical, time and subject matter limitations of this non-solicitation restriction are properly required for the adequate protection of the Members and that in the event that any such geographical, time or subject matter limitation shall be deemed to be unreasonable or otherwise invalid or unenforceable for any reason, in a final non-appealable order by a court of competent jurisdiction, then, it is intended by the Members that such part shall be enforceable to the maximum extent permitted by law, and such restriction shall be deemed to have been so written.

3.7 Option to Purchase European Business. For eighteen (18) months following the date of this Agreement the Company shall have the right to purchase BFG's DCPD Business in Europe (as defined below) as such DCPD Business in Europe exists on the date such option is exercised. The purchase price for the DCPD Business in Europe shall be one (1) million U.S. Dollars (\$1,000,000) plus the net book value of the inventory of such business, all payable in cash in a lump sum or as otherwise agreed by the parties. For purposes of this Section 3.7,



"DCPD Business in Europe" shall mean the assets and rights related to the manufacture, distribution, marketing and sale by BFG and its Affiliates of various catalysts and of DCPD-based monomers, polymers and related products in Europe. At the end of such eighteen (18) month period, the Company's option shall expire and the DCPD Business in Europe shall have the non-exclusive right to develop and use the ruthenium technology in Europe, and BFG shall have the right to retain the DCPD Business in Europe (along with the ruthenium technology) or convey it to a third party under such terms and conditions as it determines.

If the Company's option expires without exercise by the Company, the Company agrees that it shall, as soon as practicable, execute and deliver any and all agreements, documents and instruments that BFG deems necessary or desirable, to assure BFG the right to use without restriction and/or license without restriction all of the ruthenium technology then owned or possessed by the Company.

#### ARTICLE IV MANAGEMENT

4.1 Board of Directors. The Directors (the "Board of Directors") shall direct and control the business of the Company. Except as otherwise provided in this Agreement, the Directors shall have full and complete authority, power and discretion to control the business, affairs, and properties of the Company, to make all decisions regarding those matters and to perform any and all other acts or activities customary or incident to the control of the Company's business.

4.2 Composition of Board of Directors; Voting. Unless the Members agree otherwise by unanimous vote, the Board of Directors of the Company shall consist of six (6) Directors. Three (3) Directors shall be designated by each of the two Members. The three (3) Directors designated by each Member vote as a group (based on majority vote within that group) and that group shall have one (1) vote in each matter to be voted on by the Board of Directors. The persons listed on Schedule A are hereby designated as the Directors of the Company until their successors are duly chosen.

4.3 Removal of Directors. Each Member may, at any time and upon written notice to the other Members, remove any or all of the Directors designated by it with or without "cause." Any Director designated by one Member may be removed at any time, with "cause," by the other Member. "Cause" is defined as any fraud, gross negligence, intentional misconduct or act outside the scope of duties and obligations of any Director pursuant to this Agreement that has a material adverse effect on the Company. A Director shall not be removed until the Director has received written notice of the alleged grounds for removal and is given a period of three (3) business days from the giving of such notice to cure the alleged grounds for removal. Removal of the Director or Directors shall be effective upon the expiration of the applicable cure period if the default specified in the notice has not been cured.

4.4 Resignation of Directors. A Director may resign at any time by giving written notice to the Members and to the other Directors. The resignation of a Director shall take effect upon receipt of notice thereof or at such later time as may be specified in such notice. Unless

otherwise specified in such notice, the acceptance by the Members of a Director's resignation shall not be necessary to make such resignation effective. If a Director is (a) an officer or shareholder of a corporate Member, (b) a general partner of a partnership Member, (c) a member of a limited liability company Member, or (d) a fiduciary of a trust or estate of a Member, such Director shall be deemed to have resigned as soon as such corporation, partnership, limited liability company, or trust or estate ceases for any reason to be a Member of the Company.

4.5 Vacancies on Board. Whenever any vacancy shall occur among the Directors, the remaining Directors shall constitute the Directors of the Company until such vacancy is filled. A replacement Director shall be designated by the Member that had originally designated the Director whose vacancy is being filled. Each Member shall use reasonable efforts to fill any vacancy among the Directors designated by it within thirty (30) days after the vacancy first occurs.

4.6 Actions Requiring a Unanimous Vote of the Board. Actions on the following matters shall only be taken pursuant to a resolution duly adopted by a unanimous vote of the Board of Directors:

(a) Any decisions to determine or change the scope of the activities in which the Company is engaged, to change the name of the Company or to operate the business under one or more fictitious names at the same time;

(b) Any alteration of or amendment to the Certificate of Formation or this Agreement, except as otherwise permitted pursuant to Section 11.1 hereof;

(c) Any resolution to terminate this Agreement, or to wind up or dissolve the Company;

(d) The establishment or closing down of subsidiaries, divisions or branches;

(e) The declaration or payment of any distribution or dividend to a Member;

(f) The annual adoption of a three-year strategic plan, annual budget and capital budget;

(g) Any decision to acquire, assign, license, dispose, transfer or sell any Intellectual Property Rights (as defined below), including, but not limited to, any technical know-how, patents and trademarks, or any rights therein;

(h) Any transaction with a Member, an Affiliate (as defined below), or any vendor of a Member or an Affiliate of a Member;

(i) Taking any of the following actions in any calendar year, after the Manager has incurred on behalf of the Company, during such calendar year, an aggregate of \$1,000,000 relating to such transactions:

- (I) Any borrowing of funds or obligating the Company as a guarantor or surety or pledging credit; or encumbering, pledging, mortgaging or subleasing assets (if not included in the business plan for that year approved by the Board); or
- (II) Entering into any lease transaction (if not included in that year's budget approved by the Board); or
- (III) Any capital expenditures or sales of assets (if not included in that year's budget approved by the Board);
- (j) Any borrowing payable in more than one year (other than extensions of credit on normal and customary terms from trade creditors in connection with the purchase of supplies or raw materials for the Company);
- (k) The making of any investment in or loan to any business venture, firm or individual in excess of \$50,000 each or more than \$100,000 in the aggregate;
- (l) The establishment or modification of employment or compensation policies, including employment contracts, benefits plans, stock options, stock grants and bonus pools;
- (m) Any amendment or termination of any of the Ancillary Agreements identified in this Agreement;
- (n) Any additional capital contribution or increase in the Capital Account (as defined in Section 7.3);
- (o) Any issuance of any type of membership interest or any admission of new members or any issuance of any type of capital stock of the Company;
- (p) Compromise, arbitrate or otherwise settle litigation or disputes involving material issues, including, without limitation, protection of intellectual property rights, policy questions, or insurance coverage;
- (q) Approval of tax returns;
- (r) Engagement and approval of certified public accountants, auditors, commercial banks, attorneys and other professional advisors;
- (s) Contracts which present an unusual environmental exposure for the Company;
- (t) Contracts under which any penalties or liquidated damages may be assessed of more than \$25,000;

(u) Contracts which involve the purchase or sale of more than \$250,000 annually or more than \$500,000 in the aggregate in assets or which are greater than three (3) years in length (if not included in a budget approved by the Board);

(v) Contracts which raise questions under either of the BFGoodrich Ethics and Compliance with Laws Policies or any ethics policy of Advanced Polymer Technologies, L.L.C., which contracts shall be submitted to the Company's legal counsel prior to authorization or approval;

(w) Appointment or extension of the term of the officers of the Company or the Manager;

(x) Entering into research, services, distribution or sales agency agreements with any third party (if not included in the business plan approved by the Board);

(y) Elect to change the tax status of the Company.

(z) Authorizing any person or entity, including a Member to act as an agent of the Company;

(aa) Terminating or changing the rights of the Company to practice the technology initially contributed by the Members or developed or acquired by the Company during the term of this Agreement;

(bb) Determining the amounts and types of insurance coverages that it deems necessary or appropriate, including, without limitation, any public liability or hazard insurance coverage and issuance covering the indemnification by the Company as provided in Article V; and

(cc) Designating the banks or trust companies in which the Company's funds shall be deposited and the signature or signatures necessary for withdrawal from such banks or trust companies.

In the event that either Member cannot vote as a group as required by Section 4.2 on any matters included in Section 4.6, then, if it cannot vote as a group within a thirty (30) day period, the vote of the other Member shall control as to the vote on that particular matter.

For purposes of this Agreement, "**Intellectual Property Rights**" shall mean those rights in the intellectual property and other technology contributed by the Members pursuant hereto and the intellectual property and other technology developed by the Company during the term of this Agreement.

4.7 Designation of Manager. The Company will be managed by Advanced Polymer Technologies, L.L.C. (the "**Manager**") acting through the individual it nominates as President and who is unanimously approved by the Directors from time to time (the "**President**"), which President will serve until the Manager nominates and the Board approves a

replacement, or he is removed by the Board (as provided in the Bylaws) or he resigns. The Manager shall have the authority to take the actions specifically provided in this Agreement.

4.8 No Resignation of Manager. Advanced Polymer Technologies, L.L.C. may only resign as Manager of the Company after giving ninety (90) days prior written notice to the Board of Directors. The Board of Directors shall, prior to the effective date of resignation of the Manager, take all actions necessary to elect, by unanimous consent, the replacement Manager.

4.9 Manager's Authority Over Day to Day Operations. Subject to the provisions of Section 4.6, the Manager, acting through the President nominated and elected from time to time, has the authority to manage the day to day operations of the Company and is authorized to take the following actions:

(a) Acquire property on such terms as it deems reasonable, including borrowing any amounts necessary to effectuate the purchase;

(b) Take any and all actions with respect to the acquisition, management or disposition of Company properties, including, without limitation, selling and otherwise disposing of assets of the Company, borrowing of funds, and negotiation and execution of contracts, deeds, pledges, bonds, guarantees, notes, and mortgages;

(c) Execute any and all other instruments and perform any acts that the Board determines to be necessary or advisable either to carry out the intentions and purposes of the Company or to acquire, assign, exercise, dispose, transfer or sell any intellectual property rights, including technical know-how, patents and trademarks, or any rights therein as directed by the Board;

(d) As directed by the Board, borrow money on such terms as it may determine from banks or other lending institutions for any Company purpose, and pledge or mortgage Company assets to secure repayment of the borrowed sums, and execute in connection therewith any notes, security agreements, mortgages, pledges, deeds of trust or other loan documents required by any lender in connection therewith;

(e) As directed by the Board, invest Company funds in bank savings accounts, savings and loan associations, commercial paper, government securities, certificates of deposit, bankers' acceptances and other interest-bearing obligations, and deposit, withdraw, pay, retain and distribute Company funds as provided in this Agreement;

(f) Execute any and all other instruments and perform any acts necessary to admit additional Members and substitute Members pursuant to the terms of Articles III and VIII;

(g) Settle or adjust claims as they relate to day to day operations of the Company, as deemed advisable, or execute, acknowledge and deliver any and all instruments to effect any and all of the foregoing;

(h) Establish Company offices at such places as may be appropriate, hire Company employees, obtain the services of independent contractors and consultants, and otherwise arrange for the facilities and personnel necessary to carry out the purposes and business of the Company, the cost and expense thereof and incidental thereto to be borne by the Company;

(i) Obtain and maintain such public liability, hazard and other insurance as directed by the Board;

(j) Deposit all funds of the Company in one or more separate bank accounts with such banks or trust companies as the Board may designate (withdrawals from such bank accounts to be made upon such signature or signatures as the Board may designate);

(k) Maintain at the principal place of business of the Company all of the following:

(i) true and full information regarding the status of the business and financial condition of the Company;

(ii) a current list of the full name and last known business or residence address of each Member, separately listing and identifying the Manager, set forth in alphabetical order;

(iii) a copy of the Certificate and all certificates of amendment to it, together with executed copies of any powers of attorney pursuant to which this Certificate or any certificate has been executed;

(iv) a copy of this Agreement, all amendments to this Agreement, and executed copies of any written powers of attorney pursuant to which this Agreement or amendments thereto have been executed;

(v) true and full information regarding the amount of cash and a description and statement of the agreed value of any other property or services initially contributed by each Member, and the date on which each Member became a member;

(vi) copies of the Company's federal, state and local income tax returns and reports for the longer of the three most recent years or the conclusion of any federal, state or local income tax audits;

(vii) copies of any financial statements of the Company for the three most recent years; and

(viii) complete and accurate records of all properties owned or leased by the Company and complete and accurate books of account (containing such information as shall be necessary to compute allocations and distributions).

The records listed in this subsection shall be subject to inspection and copying at the reasonable request and at the expense of any Member (or his duly authorized representative) during ordinary business hours;

(l) Cause to be prepared and distributed to all Members within ninety (90) days after the end of the Company's fiscal year:

(i) A statement of cash receipts and disbursements;

(ii) A statement of income for such year;

(iii) A balance sheet as of year end; and

(iv) A statement showing all information required by the Members for preparation of their income tax returns;

(m) Cause to be filed the Certificate and such other certificates and do such other acts as may be required by law to qualify and maintain the Company as a limited liability company under the Act; and

(n) Cause Schedule A to be amended from time to time as required by this Agreement, and upon each such amendment designate at the top of such Schedule that it is an "Amended Schedule A" and indicate immediately under such designation the effective date of such amendment.

This provision does not alter or waive any duty that the Manager may have to the Company concerning the Manager's exercise of management authority and judgment.

4.10 Business Plans. Concurrent with the negotiation of this Agreement, the Manager has developed an initial strategic plan and annual budget (the "**Business Plan**") for the Company. The initial Business Plan sets forth the strategic and operating plan and one-year financial projections of the Company for the first three (3) years after the effective date of this Agreement. The Board shall ratify and adopt the initial Business Plan as soon as practicable following execution of this Agreement. For each subsequent year during the term of this Agreement, the Manager shall develop a Business Plan which shall set forth the strategic and operating plan and one-year financing projections for the Company for the next three (3) years. The Board shall cause the Company to execute the initial Business Plan and each subsequent Business Plan to the extent reasonably practicable.

4.11 Duty of Manager. The Manager, acting through the President nominated and elected from time to time, shall manage or cause to be managed the day to day operations of the Company in a prudent and businesslike manner and shall devote such time to the Company affairs as it shall in its good faith judgment, determine is reasonably necessary for the conduct of such affairs.

4.12 Reliance of Third Parties. Any financial institution or any other person, firm or corporation dealing with the Company or the Manager shall be protected in relying upon any resolutions of the Board, certified to it by any officer of the Company.

4.13 Tax Elections; Tax Matters Partner.

(a) It is the intention of the Members that the Company shall be taxed as a "partnership" for federal, state, local, and foreign income tax purposes. The Members agree to take all reasonable actions, including the amendment of this Agreement and the execution of other documents, as may reasonably be required in order for the Company to qualify for and receive "partnership" treatment for federal, state, local, and foreign income tax purposes. The Manager shall make all elections with respect to the Internal Revenue Code of 1986, as amended from time to time (the "Code") and Treasury Regulations ("Treasury Regulations" or "Treas. Reg.") issued thereunder in accordance with the direction of the Board.

(b) Advanced Polymer Technologies, L.L.C. shall be the "tax matters partner" (as defined in Code Section 6231) and is authorized and required to represent the Company (at the Company's expense) in connection with all examinations of the Company's affairs by tax authorities, and to expend Company funds for professional services and costs associated therewith. The tax matters partner shall provide all notices and perform all acts required of a tax matters partner under Subchapter C of Chapter 63 of the Code. The President is authorized to take any action that the tax matters partner determines to be necessary to comply with the requirements of Code Sections 1441, 1442, 1445 or 1446 with respect to withholding certain amounts with respect to payments or distributions to a Member who is not a U.S. person (as defined in Code Section 7701) or withholding of certain amounts with respect to the sale of a "United States real property interest" (as defined in Code Section 897). Notwithstanding the above, neither the President nor the tax matters partner shall have the authority to agree on behalf of any Member to an extension of time for assessment under Code Sections 6501(c)(4) or 6229(b)(1)(B).

(c) Within five calendar days after the receipt of any correspondence or communication from the Internal Revenue Service, relating to a Member's interest in the Company or any property contributed to, or distributed by, the Company, the tax matters partner shall forward to each Member a photocopy of all such correspondence or communication(s). The tax matters partner shall, within five calendar days thereafter, advise each Member in writing of the substance and form of any conversation or communication held with any representative of the Internal Revenue Service.

(d) In the event of any tax matter described in Section 4.16(c) instituted by the Internal Revenue Service pursuant to Section 6221 through 6233 of the Code, the tax matters partner shall consult with the other Members regarding the nature and content of all action and defense to be taken in response to such proceeding against the Company. The tax matters partner also shall consult with the other Members regarding the nature and content of any proceeding pursuant to Section 6221 through 6233 of the Code instituted by or on behalf of the Company (including the decision to institute proceedings,



whether administrative or judicial, and whether in response to a previous Internal Revenue Service proceeding against the Company or any Member).

4.14 Officers of the Company. The officers of the Company shall be a President, a Controller/Treasurer and such other officers as may be nominated by the Manager and elected by unanimous vote of the Board. The initial officers of the Company are identified on Schedule A hereto.

4.15 Authority and Duties of Officers. The officers of the Company shall have such authority and shall perform such duties as are customarily incident to their respective offices, and/or such other or additional authority and duties as may be specified in or determined pursuant to the Bylaws.

4.16 Compensation of Officers; Reimbursement of Expenses. All reasonable expenses of the officers incurred in connection with managing the Company and conducting the business of the Company shall be reimbursed by the Company, or, if billed directly to the Company, shall be paid by it.

## ARTICLE V INDEMNIFICATION

5.1 Exculpation and Indemnification of the Manager, the Officers and Directors. In carrying out their duties hereunder, the Manager, the officers and the Directors shall not be liable to the Company or to any Member for their good faith actions, or failure to act, or for any errors of judgment, or for any act or omission believed in good faith to be within the scope of authority conferred by this Agreement, but shall only be liable to the Company for their own willful misconduct, gross negligence, or material breach of their obligations under this Agreement or other material breach of their fiduciary duties. Actions or omissions taken in reliance upon the advice of legal counsel as being within the scope of authority conferred by this Agreement shall be conclusive evidence of such good faith; however, good faith may be determined without obtaining such advice.

The Company does hereby indemnify and hold harmless the Manager, the officers and the Directors and their agents, officers, employees, partners, members, shareholders, and directors against and from any and all losses, claims, damages, liabilities, expenses (including reasonable legal fees and expenses), judgments, fines, settlements and other amounts arising from any and all claims, demands, actions, suits or proceedings, civil, criminal, administrative or investigative (together, "Claims"), in which the indemnified person may be involved, or threatened to be involved, as a party or otherwise by reason of its status as a Manager, an officer or a Director, or agent, officer, employee, partner, member, shareholder or director of the Company, an officer, or a Director, or a person serving at the request of the Company in another entity in a similar capacity, to the extent it relates to or arises out of the Company's property, business or affairs, regardless of whether the indemnified person continues to be a Manager, an officer, or a Director, or its agent, officer, employee, partner, member, shareholder or director at the time any such liability or expense is paid or incurred, if (i) the indemnified person acted in

good faith and in a manner it believed to be in or not opposed to the best interests of the Company, (ii) the indemnified person's conduct did not constitute gross negligence, willful misconduct, or material breach of its obligations under this Agreement or other material breach of its fiduciary duties, (iii) in connection with any criminal action or proceeding, the indemnified person had no reasonable cause to believe its conduct was unlawful, (iv) with respect to Claims by or in the right of the Company, the indemnified person is not adjudged to be negligent or liable for misconduct, unless a court determines that indemnification is nonetheless appropriate, and (v) the standards set forth in clauses (i) and (ii), and, if applicable, (iii) and (iv), are met as determined in each case by (x) by independent legal counsel, (y) by all the Members, or (z) by an appropriate court. Notwithstanding clauses (iii) and (iv), an indemnified person shall be eligible for indemnification hereunder to the extent it has been successful on the merits with respect to any Claim. In no event shall any Member be required to make an additional capital contribution to carry out this indemnification provision.

## ARTICLE VI COMPANY CAPITAL; ADVANCES BY MEMBERS

6.1 Capital Contributions. Upon execution of this Agreement, the Members have contributed to the capital of the Company the property listed in Schedule A attached hereto pursuant to the Bills of Sale and General Assignments and the various real estate conveyance documents. The amount of the contribution indicated on Schedule A shall be the fair market value of such property as agreed by the Members, and the property shall be described in a supplement to Schedule A. The capital contributions listed in Schedule A, together with any additional contributions to the capital of the Company permitted under this Agreement (the "**Capital Contributions**"), shall be credited to the Members' Capital Accounts maintained by the Company in accordance with Section 7.3. The Members shall have no obligation to make additional Capital Contributions to the Company. No interest shall be paid on Capital Contributions.

As indicated on Schedule A, neither Member is contributing any of its accounts receivable pursuant to this Agreement, and the Members specifically agree that each Member shall be entitled to claim and collect its accounts receivable for its own account. The Company shall, upon the request of either Member, provide reasonable assistance in the collection of such accounts receivable; provided, however, that the Member requesting assistance with collection shall bear the reasonable out-of-pocket expenses incurred by the Company in providing such assistance. In addition, each Member agrees that it shall not issue or threaten to issue any court proceedings against any debtor in relation to any of the accounts receivable owing to it without giving 10 business days prior written notice to the Company of its intention to do so. The Company will have the right to purchase the relevant debts by payment to the Member to which they are owed (in which case such Member shall assign its rights against such debtor to the Company). The Member to which the receivable is owed shall not issue or threaten to issue any court proceedings until the expiration of such period of 10 business days. If such Member does subsequently bring court proceedings, it will do so in a reasonable manner having regard to the legitimate interests of the Company in respect of the Business. The Member to which the receivable is owed shall use reasonable efforts, and shall cooperate with the Company, to try to

mitigate any adverse effect the Member's collection activities may have on the Company's relationship with the relevant debtor.

6.2 Additional Capital. If at any time or times the Board determines, in accordance with Section 4.6(n), that additional capital is to be contributed to the Company, the Members shall provide such additional capital in proportion to their Percentage Interests (as defined below).

6.3 No Return of Contributions; Loans. Anything in this Agreement to the contrary notwithstanding, the Manager shall not be personally liable for the return of the Capital Contribution of a Member, or any portion thereof, it being expressly understood that any such return shall be made solely from Company assets. A Member shall not have the right to demand or receive property other than cash in return for its Capital Contribution. If any Member shall advance any monies to the Company in excess of its Capital Contribution, the amount of any such advance shall not be deemed to be an additional Capital Contribution, but instead shall be treated as a loan and shall bear interest at the minimum rate required to avoid the imputation of interest under Code Section 7872 (whether or not such Section applies to the loan) and shall be an obligation of the Company to such Member payable in accordance with the other terms of such advance prior to payment of any cash distribution pursuant to Article VII and, in the case of liquidation, in accordance with the provisions of Section 10.2.

6.4 Ancillary Agreements. The Members acknowledge that together with the contributions that each Member is making to the Company, the Members are, on the date hereof, entering into the Ancillary Agreements listed on Schedule B attached hereto.

6.5 Indemnification.

(a) From and after the conveyance of the real property to Advanced Polymer Technologies, L.L.C., BFG shall indemnify and save Advanced Polymer Technologies, L.L.C. harmless from and against any and all loss, liability, cost, damage, claim, judgment, fine, penalty, debt, or expense, including, without limitation, (i) expenses in connection with site evaluations, risk assessments and feasibility studies, and (ii) reasonable fees of counsel incurred by the indemnified party in investigating and defending any such claim which results from or arises out of or occurs in connection with:

(A) Any injury, sickness, disease or death of any person and damage to any property which results from any Condition (as defined below) existing prior to April 1, 2000; or

(B) Any remediation, treatment, and/or removal of any soil, surface water, sediments and/or groundwater resulting from any Condition existing prior to April 1, 2000;

(b) From and after the conveyance of the real property to Advanced Polymer Technologies, L.L.C., Advanced Polymer Technologies, L.L.C. shall indemnify and save

BFG harmless from and against any and all loss, liability, costs, damage, claim, judgment, fine, penalty, debt, or expense, including, without limitation, (i) expenses in connection with site evaluations, risk assessments and feasibility studies, and (ii) reasonable fees incurred by the indemnified party in investigating and defending any such claims which result from or arise out of or occur in connection with:

(A) Any injury, sickness, disease or death of any person and damage to property which results from any Condition attributable to events occurring on or after April 1, 2000; or

(B) Any remediation, treatment, and/or removal of any soil, sediments, surface water and/or groundwater resulting from any Condition attributable to events occurring on or after April 1, 2000.

For the purposes of the parties' mutual indemnification obligations hereunder, the term "Condition" shall be defined as the presence of any substance on, under, or in the land conveyed by BFG to the Company, or the groundwater thereunder.

(c) In order for the parties to establish the condition of the property prior to the conveyance, the parties agree the "baseline" data delivered at closing, represents the extent of contamination present in the groundwater both under and surrounding the real property.

The parties further agree that by July 1, 2000, the members shall establish a "baseline" of the extent, if any, of contaminants present on the real property. BFG shall employ an acceptable environmental engineering consulting firm to conduct soil sampling on the real property to determine the presence and extent of any soil contamination. The parties agree the "baseline for soils" shall be performed as typically conducted in the industry. The parties agree that this "baseline for soils" data shall represent the presence and extent of soil contamination on the real property prior to conveyance.

## **ARTICLE VII FISCAL YEAR; ACCOUNTING; ALLOCATION OF PROFITS AND LOSSES; DISTRIBUTIONS**

7.1 Fiscal Year. The fiscal year of the Company shall be October 1 through September 30; provided the Company makes the necessary filings and obtains the necessary permission for this method.

7.2 Method of Accounting. The Company books shall be kept using any reasonable method selected by the Board and consistently applied and in accordance with generally accepted accounting principles as applied in the United States. The initial accounting methods and practices shall be those determined by the Board of Directors.

7.3 Maintenance of Capital Accounts. A capital account ("Capital Account") shall be maintained by the Company for each Member in accordance with Treas. Reg. §1.704-1(b)(2)(iv). The initial amount credited to the Capital Account of each Member shall be

the fair market value of such Member's initial Capital Contribution. The Capital Account of each Member shall also be (i) credited with the fair market value of any additional Capital Contributions made by such Member, (ii) credited with the amount of any Profits and any other items of income or gain allocated to such Member, (iii) debited by the amount of any Losses and any other items of loss or deduction allocated to such Member, and (iv) debited with the amount of all actual distributions made to such Member. Any contribution or distribution of property in kind shall be credited or debited, respectively, in an amount equal to the Carrying Value of such property, net of liabilities secured by such property that the Company or a Member, respectively, is considered to assume or take subject to under Code Section 752. Upon adjustment to the adjusted tax basis of Company property pursuant to Code Sections 732, 734 or 743, the Capital Accounts of the Members shall be adjusted as provided in Treas. Reg. §1.704-1(b)(2)(iv)(m).

#### 7.4 Allocation of Profits and Losses.

(a) Profits shall be allocated to the Members as follows:

(i) first, to those Members who have deficit balances in their Capital Accounts, pro rata in proportion to such deficit balances, until such deficit balances have been eliminated and the balances in their Capital Accounts have been restored to zero; and

(ii) thereafter, in accordance with the Members' Percentage Interests. The term "**Percentage Interests**" shall mean the percentage interest of any Member in the Company determined by dividing the number of Units held by such Member by all outstanding Units. "**Units**" is a term used in this Agreement for purposes of making allocations and determining certain votes; the Units allocated to each Member is indicated on Schedule A. Units shall not represent a Member's interest in the capital of the Company, which is determined solely by a Member's Capital Account.

(iii) Losses shall be allocated to the Members in accordance with their Percentage Interests.

(iv) The special allocations set forth in Section 13.2 shall be made prior to the allocations under this Section.

(v) "**Profits**" and "**Losses**" shall mean an amount equal to the Company's taxable income or loss, respectively, for any period from all sources, determined in accordance with Code Section 703(a), adjusted in the following manner: (A) the income of the Company that is exempt from federal income tax or not otherwise taken into account in computing Profits and Losses pursuant to this definition shall be added to such taxable income or loss; (B) any expenditures of the Company described in Code Section 705(a)(2)(B) or treated as described in such Section pursuant to Treas. Reg. §1.704-1(b)(2)(iv)(i) or not otherwise taken into account in computing Profits or Losses pursuant to this definition shall be subtracted from such taxable income or loss; (C) in the event the Carrying Value

of any Company asset is adjusted pursuant to Section 14.2(c)(ii), (iii) or (iv) hereof, the amount of such adjustment shall be taken into account as gain or loss from the disposition of such asset for purposes of computing Profits and Losses; (D) gain or loss resulting from the disposition of an asset shall be computed by reference to the Carrying Value of such asset; (E) a deduction for Depreciation shall be taken in lieu of a deduction for depreciation, amortization or cost recovery allowable for federal income tax purposes for such fiscal year; (F) to the extent an adjustment under Code Section 734(b) is required by Treas. Reg. §1.704-1(b)(2)(iv)(m)(4) to be taken into account in determining Capital Accounts as a result of a distribution other than in liquidation of a Member's interest, the amount of such item shall be treated as an item of gain or loss from the disposition of the asset and shall be taken into account for purposes of computing Profits or Losses; and (G) any items that are specially allocated pursuant to Section 14.2 shall not be taken into account in computing Profits and Losses. **"Depreciation"** shall mean, for each fiscal year, an amount equal to the depreciation, amortization or cost recovery deduction allowable for federal income tax purposes for such fiscal year, unless the Carrying Value for an asset differs from the adjusted basis of such asset for federal income tax purposes, in which case Depreciation shall mean an amount that bears the same ratio to the beginning Carrying Value as the depreciation, amortization or cost recovery deduction bears to the beginning adjusted tax basis, provided, however that if the adjusted basis of an asset is zero at the beginning of a fiscal year, Depreciation shall be determined by the Board by using any reasonable method.

7.5 Distribution of Net Cash Flow. Except in connection with the liquidation of the Company, in which case all distributions shall be made in accordance with Article X, distributions of Net Cash Flow shall be made to the Members on the last business day of February, May, August and November (each such date a **"Distribution Date"**) as follows:

(a) first, to the Members, in proportion to their respective Percentage Interests until the Member having the highest projected tax liability arising from the Company's activities receives an amount equal to the Member's projected tax liability for each quarter. Such projected tax liability will be computed based upon the Member's estimated taxable income from the Company and the nature of that income for the quarter, times highest federal, State, and local income tax rate that may be imposed on that Member. Such projected tax liability will be appropriately reduced by the federal income tax benefit attributable to the payment of the Member's estimated state and local taxes.

(b) any additional amounts to the Members according to their Percentage Interests as may be determined by the Board.

7.6 Definition of Net Cash Flow. **"Net Cash Flow"** of the Company shall be computed by deducting from the gross amounts received by the Company from all sources: (i) all operating expenses of the business, including management fees (if any), taxes, and insurance premiums, but excluding depreciation and amortization allowances, (ii) interest and principal

payments on indebtedness of the Company (including advances by Members in accordance with Section 6.3), (iii) proceeds from borrowing or proceeds from the sale, exchange or other disposition of Company assets, (iv) additions to reserves, (v) all cash expenditures for fixed asset additions, improvements and replacements, (vi) capital contributions, and (vii) any other amounts that the Board determines shall be retained for investment in the Company business.

7.7 Liability of Member for Return of Distribution. Each Member understands that if it receives cash or other property in violation of §18-607 of the Act, it may be liable to the Company for three years for the return of such amount pursuant to such Section.

## ARTICLE VIII TRANSFER OF COMPANY INTERESTS

8.1 General Obligations. No Member may sell, assign, pledge, otherwise encumber, or transfer all or any part of its membership interest in the Company; provided, however, that a Member may transfer all or any part of its membership interest to an Affiliate or to another Member who assumes the obligations under this Agreement. Notwithstanding the foregoing, if any transfer of all or a part of a Member's membership interest, whether to an Affiliate, to another Member, or to a third party, causes a termination of the Company under Code Section 708, the Member transferring said interest or part of an interest shall indemnify the non-transferring Member(s), and promptly reimburse any non-transferring Member(s), for the entire cash tax cost of said termination, including interest at the US prime rate, upon written demand with reasonable documentation, provided that such termination causes a cash cost in excess of US \$7,500, for taxes and/or interest. The cash tax cost included in such claim for reimbursement may be calculated on an as-filed basis. The aforesaid cash tax cost shall include amortization and depreciation costs using the most recent monthly fixed asset records. However, in the event that it is determined at the conclusion of a US Federal income tax audit of the Federal income tax return of the non-transferring Member(s) that the cash tax cost is more than \$5,000 greater or less than the amount paid, such Member shall promptly notify the non-transferring Member(s), and the respective parties shall adjust and settle the amount, as the case may be, and pay interest on the amount of the adjustment at the US prime rate of interest.

8.2 Compliance with Securities Act of 1933. No Member's membership interest in the Company has been registered under the Securities Act of 1933 in reliance upon the exemption provided in Section 4(2) of such act. Notwithstanding any other provisions in this Agreement, no membership interest in the Company of a Member may be offered for sale, sold, transferred or otherwise disposed of unless, at the expense of the transferring Member, the Company has received an opinion of counsel for the Company or counsel acceptable to the Company's counsel, to the effect that such transfer is exempt from registration under the Securities Act of 1933 and is in compliance with all applicable federal and state securities laws and regulations. The Board may, in its sole discretion, waive the requirements of this Section with respect to the transfer of any membership interest, but any such waiver shall not constitute a waiver of any subsequent transfer of such membership interest or the transfer of any other membership interest.

8.3 Transfer of Membership Interests to Other Members. If any Member sells, assigns or otherwise transfers all or any part of its membership interest in the Company to another Member, it may do so at such price and on such other terms as the parties may agree.

8.4 Valuation for Transfer of Membership Interests to Other Members.

(a) In the event of a transfer of membership interests in the Company from one Member to another Member, the agreed upon termination, or sale of ownership to the other Member, the purchase price shall be the value of such membership interests as agreed by the Members. In the absence of such an agreement, the purchase price shall be the fair market value of such interests as determined by an independent investment firm appointed by mutual consent of the parties. The independent investment firm shall make a decision within sixty (60) days subsequent to its appointment. If the parties cannot agree upon the selection of an independent investment firm, the parties will each choose an investment advisory firm to determine the fair market value of the interests to be sold. The two firms shall render their decision on valuation within sixty (60) days of receiving their mandate.

(b) If the two firms are unable to agree, the firms will nominate an independent external firm who will determine the fair market value of the interests to be sold within sixty (60) days subsequent to its appointment. The purchase price will be 90% of the valuation of the external firm. In no event will a control premium be considered part of the valuation.

8.5 Transfer of Membership Interests to a Third Party.

(a) In the event either Member wishes to transfer all of its membership interest to a third party (such Member being herein referred to as "Seller"), it shall first offer to transfer such membership interest to the other Member at the price and on the terms and conditions offered by the third party by providing written notice thereof, which notice shall include a copy of the written offer made by such third party including all terms and conditions thereof. Within sixty (60) days of the receipt of Seller's notice, the other Member may either (i) accept the offer to purchase the membership interest at the price and on the other terms set forth in the third party offer, (ii) accept the offer to purchase the membership interest at the price and on the other terms set forth in the third party offer but only if the Seller resigns as Manager, if applicable, or (iii) decline such offer. In the event that the other Member does not take any such action in response to the notice, it shall be deemed to have declined the offer.

(b) If the other Member accepts the offer of the Seller pursuant to clauses (i) or (ii) of Section 8.5(a), then the other Member, or an Affiliate designated by it, shall purchase the offered membership interest pursuant to the terms of the third party offer (and, as applicable, may cause the Affiliate purchaser to be admitted as a substituted Member and continue the business of the Company without dissolution). If the other Member declines the offer or is deemed to have declined the offer, the offering Member



shall, within sixty (60) days of the declined or deemed declined offer, have the right to transfer its membership interest to such third party at a price, not less than that included in Seller's notice, and otherwise on the terms and conditions set forth in the Seller's notice, then at the time of closing of the transfer, the transferee shall be admitted as a substituted Member with respect to the transferred interest and the business of the Company shall be continued.

(c) The right of first refusal to purchase the membership interests set forth in this Section 8.5 shall only apply to transfers of the membership interest for consideration and, in addition, shall not apply to:

- (i) a change of control of BFG or any Affiliate of BFG, or a transfer of all or a substantial portion of the assets of BFGoodrich Performance Materials;
- (ii) a transfer of all or a substantial portion of the membership interest of Advanced Polymer Technologies, L.L.C. to any member of Advanced Polymer Technologies, L.L.C. as of the date of this Agreement;
- (iii) an offering of interests in the Company to the public; or
- (iv) any financing of the Company.

8.6 Allocations and Distributions with Respect to Transferred Interests. If any transfer of an interest in the Company permitted by this Agreement occurs during a fiscal year (whether or not the assignee is admitted as a substituted Member), then all allocations of Profits and Losses attributable to the transferred interest for such year shall be divided and allocated between the transferor and the transferee by taking into account their varying interests during such fiscal period, using any convention or method of allocation selected by the Board which is then permitted under Code Section 706 and the regulations promulgated thereunder. All distributions of Net Cash Flow made prior to the effective date of any such transfer shall be made to the transferor and any such distributions made after the effective date of such transfer shall be made to the transferee.

## ARTICLE IX WITHDRAWAL, DEATH, INCOMPETENCY OR DISSOLUTION OF MEMBERS

9.1 Withdrawal of Member. No Member shall have the right to withdraw from the Company except with the consent of all of the other Members and upon such terms and conditions as may be specifically agreed upon between such other Members and the withdrawing Member. The provisions hereof with respect to distributions upon withdrawal are exclusive and no Member shall be entitled to claim any further or different distribution upon withdrawal under §18-604 of the Act or otherwise.

9.2 Death, Bankruptcy, Liquidation, Etc., of a Member. A Member shall not cease to be a Member by reason of the items listed in § 18-304(a)(1) through (6) of the Act. The happening of any such event shall not operate to cause the dissolution of the Company. Upon the death or bankruptcy of an individual Member or the bankruptcy, dissolution or other cessation to exist as a legal entity of a Member not an individual, and after such time as the Company shall have received written notice thereof, the authorized representative of such individual or entity shall have all of the rights of a Member for the purposes of effecting the orderly winding up and disposition of the affairs of such individual or entity

9.3 Default. In the event that either of the Members should default in the performance of any of the terms, conditions, undertakings, covenants, or obligations set forth in this Agreement and such default shall not have been remedied within thirty (30) days after written notice thereof from the other Member, such other Member may, without prejudice to any other remedies available to it at law or in equity, deliver written notice to the defaulting Member electing, either (i) to dissolve the Company pursuant to this Agreement, or (ii) to purchase the defaulting Member's interest at fair market value, less the amount of any loss, damage, cost, or expense incurred by the nondefaulting Member as a consequence of the default. In the event that the other Member determines to purchase the interest of the defaulting Member pursuant to clause (ii) above, then the Member whose interest is to be acquired shall be deemed to be withdrawn.

## ARTICLE X TERMINATION, DISSOLUTION AND LIQUIDATION OF THE COMPANY

10.1 Events of Dissolution. The Company shall be dissolved and liquidated in accordance with the provisions of this Article upon the occurrence of the following events:

- (a) any event described herein which causes dissolution and the failure of the Members to elect to continue the Company, or
- (b) upon the unanimous determination of the Board; or
- (c) an inability of the Directors to resolve, within ninety (90) days, a disagreement among the Directors with respect to any of the material operating matters set forth in Section 4.6 or a deadlock of over ninety (90) days.

### 10.2 Liquidation.

(a) Upon the dissolution of the Company, a liquidation trustee (the "**Liquidating Trustee**") appointed pursuant to Section 10.3, shall proceed with the liquidation of the Company, and the liquidation proceeds shall be applied in the following order:

(i) To creditors in order of priority as provided by law, except for any indebtedness owing to any Member;

(ii) To the establishment of any reserves that may be deemed by the Liquidating Trustee or other persons having control of the liquidation proceedings to be reasonably necessary for any contingent or unforeseen liabilities or obligations of the Company;

(iii) To the Members in satisfaction of any indebtedness owing to them;  
and

(iv) To the Members in accordance with their positive Capital Account balances.

(b) Upon liquidation of the Company, no Member shall be required to contribute any amount to the Company solely because of a deficit balance in his capital account and any such deficit balance shall not for any purpose be considered an asset of the Company.

(c) For purposes of the liquidation of the Company assets, the discharge of its liabilities and the distributions of the remaining funds among the Members as above described, the Liquidating Trustee shall, on behalf of the Company, first make reasonable efforts to sell, convey, exchange or otherwise transfer all of the assets of the Business as a going concern. If the Liquidating Trustee is not able to sell, convey, exchange or transfer all of the assets of the Business as a going concern, it shall, on behalf of the Company, sell, convey, exchange or otherwise transfer all of the assets of the Company (including the Intellectual Property Rights) for such consideration and upon such terms and conditions as it deems appropriate. A reasonable time shall be allowed for the orderly liquidation of the assets of the Company and the discharge of liabilities of the Company to creditors to enable the Company to minimize normal losses during a liquidation period, and the Company shall continue to operate the Business during such liquidation period. Any return of all or any portion of the contributions made by a Member to the capital of the Company shall be made solely from Company assets, and the Manager shall not be personally liable for any such return, except to the extent provided in the preceding subsection.

10.3 Election of Liquidating Trustee. The Members shall elect, by unanimous vote, any person, firm or corporation of their choice to act as Liquidating Trustee in the liquidation of the Company business in accordance with the provisions of this Article. If the Members are unable to agree on the designation of the Liquidating Trustee, then each Member shall designate as unaffiliated representative, and such representatives shall designate the Liquidating Trustee.

10.4 Statements. Each of the Members shall be furnished with a statement prepared by the Company's accountants, which shall set forth the assets and liabilities of the Company as of the date of complete liquidation. When the Liquidating Trustee has complied with the

distribution plan set forth in this Article, the Liquidating Trustee shall execute and cause to be filed a Certificate of Cancellation of the Company.

## ARTICLE XI AMENDMENT OF THE AGREEMENT

11.1 Amendments by Manager. This Agreement may be amended only upon unanimous approval of the Board; provided, however, that the President may take action to amend this Agreement, without the approval of the Board only:

(a) for the purpose of taking an action to implement a unanimous decision by the Board to substitute or delete a Member or to admit an additional Member in accordance with the provisions of this Agreement; or

(b) in the opinion of counsel for the Company, as necessary or appropriate to satisfy current requirements of the Code with respect to limited liability companies or any federal or state securities laws or regulations.

Any amendment made pursuant to subsection (a) or (b) may be made effective as of the date of this Agreement. All Members shall be notified as to the substance of any amendment to this Agreement and upon request shall be furnished a copy thereof.

## ARTICLE XII POWER OF ATTORNEY

12.1 Appointment of President as Attorney. In order to facilitate the preparation and signing of documentation in connection with the Company, each Member by his or her signature hereto irrevocably makes, constitutes and appoints the President, each person who shall hereafter become a President, and each of them, its true and lawful attorney in its name, place and stead with the power from time to time to make, execute, swear to, acknowledge, verify, deliver, file, record and publish:

(a) All certificates or other instruments which may be required to be filed by the Company under the laws of the State of Delaware or of any other state or jurisdiction in which the Company shall transact business; and

(b) All documents, certificates or other instruments, including, without limiting the generality of the foregoing, any and all amendments and modifications of this Agreement or of the instruments described in Section 11.1 (a) or (b) which may be required or deemed desirable by the President to effectuate the provisions of any part of this Agreement and by way of extension and not in limitation to do all such other things as shall be necessary to continue the Company under the laws of the State of Delaware and of any state or jurisdiction in which it shall do business.

12.2 Power of Attorney Irrevocable. It is expressly intended by each Member that the foregoing power of attorney is a special power of attorney coupled with an interest in favor of the President, and as such shall be irrevocable and shall survive the death, incompetency or adjudication of insanity (and, in the case of a Member that is not a natural person, the merger, dissolution or other termination of existence) of a Member.

12.3 Survival of Power of Attorney on Transfer. The foregoing power of attorney shall survive the delivery of an assignment by any Member of the whole or any portion of its interest in the Company, except that where an assignee of such interest has been approved by the Board as a substituted Member, then the foregoing power of attorney of the assignor Member shall survive the delivery of such assignment for the sole purpose of enabling the Manager to execute, swear to, acknowledge and file any and all instruments necessary to effectuate such substitution. The power of attorney may be exercised by facsimile signature of the President or by listing all of the Members executing, swearing to or acknowledging any instrument with a single signature of the President, acting as attorney-in-fact for all of them.

### ARTICLE XIII DEFINITIONS, TAX PROVISIONS

13.1 Definitions. The capitalized terms used in this Agreement shall have the meanings as defined in the provision referenced below, where such term appears in boldface print. Defined terms used in only one Section of this Agreement may not be listed below.

- (a) "Act" is defined in the preamble.
- (b) "Adjusted Capital Account Balance" is defined in Section 13.2(a)(iii).
- (c) "Affiliate" is defined in Section 3.3(a).
- (d) "Agreement" is defined in the preamble.
- (e) "BFG" is defined in Section 3.3(b).
- (f) "Board of Directors" is defined in Section 4.1.
- (g) "Business" is defined in Section 2.1.
- (h) "Business Plan" is defined in Section 4.10.
- (i) "Capital Account" is defined in Section 7.3.
- (j) "Capital Contributions" is defined in Section 6.1.
- (k) "Carrying Value" is defined in Section 13.2(c)(i).

- (l) **"Certificate"** is defined in Section 1.2.
- (m) **"Code"** is defined in Section 4.13.
- (n) **"Company"** is defined in Section 1.1.
- (o) **"Confidential Information"** is defined in Section 3.3(d).
- (p) **"DCPD Business In Europe"** is defined in Section 3.7.
- (q) **"Depreciation"** is defined in Section 7.4(a)(v).
- (r) **"Distribution Date"** is defined in Section 7.5.
- (s) **"fair market value"** is defined in Section 7.3.
- (t) **"Intellectual Property Rights"** is defined in Section 4.6.
- (u) **"Liquidating Trustee"** is defined in Section 10.3.
- (v) **"Losses"** is defined in Section 7.4(a)(v).
- (w) **"Manager"** is defined in Section 4.7.
- (x) **"Member Nonrecourse Debt"** is defined in Section 13.2(a)(ii).
- (y) **"Member Nonrecourse Debt Minimum Gain"** is defined in Section 13.2(a)(ii).
- (z) **"Members"** is defined in Section 3.1.
- (aa) **"Minimum Gain"** is defined in Section 13.2(a)(i).
- (bb) **"Net Cash Flow"** is defined in Section 7.6.
- (cc) **"Nonrecourse Deductions"** is defined in Section 13.2(a)(iv).
- (dd) **"Nonrecourse Liability"** is defined in Section 13.2(a)(iv).
- (ee) **"Percentage Interests"** is defined in Section 7.4(a)(ii).
- (ff) **"President"** is defined in Section 4.7.
- (gg) **"Profits"** is defined in Section 7.4(a)(v).
- (hh) **"Solicitation"** is defined in Section 3.6(a).

(ii) "Treasury Regulations" or "Treas. Reg." are defined in Section 4.13.

(jj) "Units" is defined in Section 7.4(a)(ii).

13.2 Tax Provisions. The following provisions apply for all purposes of this Agreement.

(a) Allocations Required by Treasury Regulations.

(i) Subject to the exceptions set forth in Treas. Reg. §§1.704-2(f)(2)--(5), if there is a net decrease in Minimum Gain during any fiscal year, each Member shall be specially allocated items of Company income and gain for such year (and, if necessary, subsequent years) in an amount equal to such Member's share of the net decrease in Minimum Gain, determined in accordance with Treas. Reg. §1.704-2(g)(2). "Minimum Gain" shall have the meaning set forth in Treas. Reg. §§1.704-2(b)(2) and 1.704-2(d). This paragraph is intended to comply with the minimum gain chargeback requirement in Treas. Reg. §§1.704-2(b)(2) and (f) and shall be interpreted consistently therewith.

(ii) Subject to the exceptions set forth in Treas. Reg. §1.704-2(i)(4), if there is a net decrease in Member Nonrecourse Debt Minimum Gain during any fiscal year of the Company, each Member who has a share of the Member Nonrecourse Debt Minimum Gain, determined in accordance with Treas. Reg. §1.704-2(i)(3), shall be specially allocated items of Company income and gain for such year (and, if necessary, subsequent years) in an amount equal to such Member's share of the net decrease in Member Nonrecourse Debt Minimum Gain, determined in accordance with Treas. Reg. §1.704-2(i)(5). This paragraph is intended to comply with the minimum gain chargeback requirement in Treas. Reg. §1.704-2(i)(4) and shall be interpreted consistently therewith. "Member Nonrecourse Debt Minimum Gain" means an amount, with respect to each Member Nonrecourse Debt, determined in accordance with Treas. Reg. §1.704-2(i) with respect to "partner nonrecourse debt minimum gain." "Member Nonrecourse Debt" shall have the meaning set forth in Treas. Reg. §1.704-2(b)(4) for "partner nonrecourse debt."

(iii) In the event any Member unexpectedly receives any adjustments, allocations or distributions described in Treas. Reg. §1.704-1(b)(2)(ii)(d)(4), (5) or (6), items of Company income and gain shall be specially allocated to such Member in an amount and manner sufficient to eliminate the deficits in its Adjusted Capital Account Balance created by such adjustments, allocations or distributions as quickly as possible. This paragraph is intended to constitute a "qualified income offset" within the meaning of Treas. Reg. §1.704-1(b)(2)(ii)(d), and shall be interpreted consistently therewith. "Adjusted Capital Account Balance" means the balance in the Capital Account of a Member as of the end of the relevant fiscal year of the Company, after giving effect to the following: (a)

credit to such Capital Account any amounts the Member is obligated to restore, pursuant to the terms of this Agreement or otherwise, or is deemed obligated to restore pursuant to the penultimate sentences of Treas. Reg. §§1.704-2(g)(1) and 1.704-2(i)(5), and (b) debit to such capital account the items described in Treas. Reg. §§1.704-1(b)(2)(ii)(d)(4), (5) and (6).

(iv) Nonrecourse Deductions for any fiscal year or other period shall be specially allocated to the Members in accordance with their Percentage Interests. **"Nonrecourse Deductions"** shall have the meaning set forth in Treas. Reg. §1.704-2(b)(1). The amount of Nonrecourse Deductions for a fiscal year of the Company equals the excess, if any, of the net increase, if any, in the amount of Minimum Gain during that fiscal year over the aggregate amount of any distributions during that fiscal year of proceeds of a Nonrecourse Liability that are allocable to an increase in Minimum Gain, determined according to the provisions of Treas. Reg. §1.704-2(c). **"Nonrecourse Liability"** shall have the meaning set forth in Treas. Reg. §1.704-2(b)(3).

(v) In accordance with Code Section 704(c) and the regulations thereunder, income, gain, loss and deduction with respect to any property that has a Carrying Value different from its adjusted tax basis for federal income tax purposes shall, solely for tax purposes, be allocated among the Members so as to take account of any variation between such adjusted tax basis and its Carrying Value. As soon as practicable after the date hereof, the Board shall select one of the methods described in Treas. Reg. §1.704-3 for each asset listed on Schedule A-1 and Schedule A-2 such that, to the extent possible, the overall effect of the combination of methods selected by the Board results in equal net tax deductions (on a present value basis) from such assets to the Members (assuming for this purpose that the Company will hold such assets throughout their useful lives for federal income tax purposes).

(vi) The allocations set forth in Section 13.2(a) are intended to comply with certain requirements of Treasury Regulations promulgated under Code Section 704. Such allocations shall be taken into account in allocating other Profits, Losses, and items of income, gain, loss, and deduction to each Member so that, to the extent possible, and to the extent permitted by Treasury Regulations, the net amount of such allocations of other Profits, Losses, and other items and such allocations to each Member shall be equal to the net amount that would have been allocated to each Member if such allocations had not been made.

(b) Rules of Application.

(i) Profits and Losses and other items of income, gain, loss and deduction shall be allocated to the Members in accordance with the portion of the year during which the Members have held their respective interests. All items of income, loss and deduction shall be considered to have been earned ratably over the period of the fiscal year of the Company, except that (A) gains and losses



arising from the disposition of assets shall be taken into account as of the date thereof, and (B) with the consent of the Manager and all affected parties, the preceding items may be allocated by using an "interim closing of the books" method.

(ii) In the event the Company is entitled to a deduction for interest imputed under any provision of the Code on any loan or advance from a Member (whether such interest is currently deducted, capitalized or amortized), such deduction shall be allocated solely to such Member.

(iii) To the extent any payments in the nature of fees paid to a Member are finally determined to be distributions to a Member for federal income tax purposes, there will be a gross income allocation to such Member in the amount of such distribution.

(iv) Losses shall not be allocated to any Member to the extent that such allocation would result in a deficit in its Adjusted Capital Account Balance while any other Member continues to have a positive Adjusted Capital Account Balance; in such event Losses shall first be allocated to Members with positive Adjusted Capital Account Balances in proportion to such balances, until their positive Adjusted Capital Account Balances have been reduced to zero. To the extent that any Losses are allocated pursuant to this paragraph, Profits shall thereafter be allocated in reverse order of such allocations of Losses to the extent of such Losses.

(v) The allocation of Profits and Losses to any Member shall be deemed to be an allocation to that Member of the same proportionate part of each separate item of taxable income, gain, loss, deduction or credit that comprises such Profits and Losses.

(c) Rules Concerning Calculations of Profits and Losses and Code Section 704(c) Tax Allocations.

(i) For purposes of computing Profits and Losses, "Carrying Value" shall mean (a) with respect to contributed property, the fair market value of such property reduced (but not below zero) by Depreciation, (b) with respect to property the book value of which is adjusted pursuant to Treas. Reg. §§1.704-1(b)(2)(iv)(d), (e) or (f), the amount determined pursuant to Sections 13.2(c)(iii) or (iv), and (c) with respect to any other property, the adjusted basis of such property for federal income tax purposes as of the time of determination.

(ii) Upon the occurrence of any of the following events, the Carrying Value of Company property shall be adjusted to its fair market value, as determined by the Board:

(A) The acquisition of an interest in the Company by a new or existing Member in exchange for more than a *de minimis* contribution of money or property;

(B) The distribution by the Company to a continuing or retiring Member of more than a *de minimis* amount of property or money in consideration for an interest in the Company; or

(C) The "liquidation" of the Company within the meaning of Treas. Reg. §1.704-1(b)(2)(ii)(g).

The revaluation of the Company property referred to in the immediately preceding sentence shall be made in accordance with Treas. Reg. §1.704-1(b)(2)(iv)(f).

(iii) Upon an issuance of additional interests in the Company for cash or contributed property, the Carrying Value of all Company properties shall, immediately prior to issuance, be adjusted (consistent with the provisions hereof) upward or downward to reflect any unrealized gain or unrealized loss attributable to each Company property (as if such unrealized gain or unrealized loss had been recognized upon an actual sale of such property at the fair market value thereof immediately prior to such issuance, and had been allocated to the Members, at such time, pursuant to Section 7.4 of this Agreement). In determining such unrealized gain or unrealized loss attributable to the properties, the fair market value of Company properties shall be determined by the Board using such reasonable methods of valuation as it may adopt.

(iv) Immediately prior to the distribution of any Company property in liquidation of the Company or in redemption of all or part of any Member's interest in the Company, the Carrying Values of all Company properties shall be adjusted (consistent with the provisions hereof) upward or downward to reflect any unrealized gain or unrealized loss attributable to each Company property (as if such unrealized gain or unrealized loss had been recognized upon an actual sale of each such property, immediately prior to such distribution, and had been allocated to the Members, at such time, pursuant to Section 7.4 of this Agreement). In determining such unrealized gain or unrealized loss attributable to the properties, the fair market value of Company properties shall be determined by the Board using such reasonable methods of valuation as it may adopt.

(v) In accordance with Code Section 704(c) and the regulations thereunder, income, gain, loss and deduction with respect to any contributed property shall, solely for tax purposes, be allocated among the Members so as to take account of any variation between the adjusted basis of such property to the Company for federal income tax purposes and its Carrying Value, pursuant to the method permitted by the regulations and determined by the Board.

(vi) In the event the Carrying Value of any Company asset is adjusted as described in paragraph (iii) or (iv) above, subsequent allocations of income, gain, loss and deduction with respect to such asset shall take account of any variation between the adjusted basis of such asset for federal income tax purposes and its Carrying Value in accordance with Treas. Reg. §1.704-3(a)(6).

(vii) A transferee of a Company interest will succeed to the Capital Account relating to the Company interest transferred.

#### **ARTICLE XIV MISCELLANEOUS**

14.1 Notices. Any and all notices or other communications which may be sent to any Member shall be sent to the address listed in Schedule A, unless the Company is notified in writing of any change of address. Notices or other communications shall be deemed to have been given only when hand delivered or deposited with the United States Post Office by registered or certified mail addressed as set forth above.

14.2 No Partition of Company Property. Each of the Members hereby irrevocably waives any and all rights, duties, obligations and benefits with respect to any action for partition of Company property or to compel any sale thereof. Further, all rights, duties, benefits and obligations, including inventory and appraisal of the Company assets or sale of a deceased Member's interest therein, provision for which is made in the Act, or on account of the operation of any other rule or law of any other jurisdiction to compel any sale or appraisal of Company assets or sale of a deceased Member's interest therein, are hereby waived and dispensed with and the interest in the Company of a deceased Member shall be subject to the provisions of this Agreement.

14.3 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware.

14.4 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which shall constitute one agreement, notwithstanding that all of the parties are not signatories to the original or the same counterpart, or that signature pages from different counterparts are combined, and the signature of any party to any counterpart shall be deemed to be a signature to and may be appended to any other counterpart.

14.5 Language Conventions: Captions. Words of any gender used in this Agreement shall be held to include any other gender, and words of the singular number shall be held to include the plural (and vice-versa), when the sense requires. The captions to each Article and Section are inserted only as a matter of convenience and for reference only and in no way define, limit or describe the scope or intent of this Agreement or in any way affect it.

14.6 Schedules; Entire Agreement. All schedules and exhibits attached to this Agreement are incorporated herein and made a part hereof in the same manner and to the same extent as if such exhibits and schedules were set forth at length herein. There are no representations, agreements, arrangements or understandings, oral or written, between and among the parties hereto relating to the subject matter of this Agreement which are not described herein.

14.7 Provisions Severable. This Agreement is intended to be performed in accordance with and only to the extent permitted by, all applicable laws, ordinances, rules and regulations of the jurisdictions in which the Company does business. If any provision of this Agreement, or the application thereof to any person or circumstance, shall for any reason and to any extent be invalid or unenforceable, the remainder of this Agreement and the application of such provision to other persons or circumstances shall not be affected thereby, but rather shall be enforced to the greatest extent permitted by law.


14.8 Binding Agreement. This Agreement shall be binding upon and shall inure to the benefit of all Members and their respective legal representatives, heirs, permitted successors and permitted assigns.

14.9 APRIMA. BFG hereby consents to the Company accepting or using the term "APRIMA" as a mark. The Members specifically acknowledge that neither Member has conducted any investigation as to the availability of the term "APRIMA" for use as a mark for trademark use.

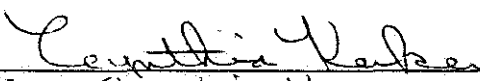
IN WITNESS WHEREOF, the parties have entered into this Agreement and have hereunto set their hands to multiple copies hereof to be effective as provided in Section 1.2.

MEMBERS:

ADVANCED POLYMER TECHNOLOGIES,  
L.L.C.

By:   
Name: C. S. Goodson  
Title: President

THE B.F.GOODRICH COMPANY

By:   
Name: Cynthia Karker  
Title: DIRECTOR OF FINANCE

## APT, LLC

Address of Principal Office of <u>The Company</u>	Address of Registered Office <u>of the Company</u>	Name and Address of Agent of the Company for <u>Service of Process</u>
7629 State Highway 75 South Huntsville, Texas 77340	The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, Delaware 19801	The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, Delaware 19801

Name and Business Address of <u>Managing Member(s)</u>	<u>Capital Contribution</u>	<u>Percentage Interest</u>	<u>No. of Units</u>
Advanced Polymer Technologies, L.L.C.	See Schedule A-1	50%	50

Name and Address <u>of Other Member(s)</u>	<u>Capital Contribution</u>	<u>Percentage Interest</u>	<u>No. of Units</u>
BFG	See Schedule A-2	50%	50

Names of  
Initial Directors

1. Cindy Kerker
2. Julian Steinberg
3. Kent Darragh
4. Charles S. Woodson
5. Robert H. Grubbs
6. Nelson D. Abell, III

Names of Initial Officers

President: Charles S. Woodson  
Controller/Treasurer: Arlene Dillworth  
Secretary: William M. Knolle

Advanced Polymer Technologies, L.L.C.  
Capital Contribution to  
APT, LLC

- |   | Value    |
|---|----------|
| A. <u>Intellectual Property</u>   | \$ _____ |
| (See list at APT, Inc. A.1)   |          |
| B. <u>Real Property</u>   | \$ _____ |
| 1. Fee Simple Interest in Real Property at<br>7629 State Highway 75 South, Huntsville, Texas<br>77340<br>(Legal Description at APT, Inc. B.1) |          |
| 2. Options to acquire Real Property (2 Parcels) at State<br>Highway 75 South, Huntsville, Texas (Legal<br>Description at APT, Inc. B.2)       |          |
| C. <u>Inventories</u>   | \$ _____ |
| 1. Ruthenium – Based Polymerized<br>DCPD (see list at APT, Inc. C.1)  |          |
| [others to come?]   |          |
| D. <u>Equipment</u>   |          |
| 1. Lab Equipment<br>(See list at APT, Inc. D.1)   |          |

Notwithstanding anything in the Operating Agreement or in the Schedules thereto, Advanced Polymer Technologies, L.L.C. shall not contribute to the Company any accounts receivable generated by Advanced Polymer Technologies, L.L.C. or any of its Affiliates.

SCHEDULE A-2

BFG Capital Contribution  
to APT, LLC

- |  | Value    |
|--|----------|
| A. <u>Intellectual Property</u>  | \$ _____ |
| (See list at BFG A-1)  |          |
| B. <u>Real Property</u>  | \$ _____ |
| 1.    License to Use Space at 9911 Brecksville Road,<br>Brecksville, Ohio 44141-3247.                    |          |
| 2.    Lease of Manufacturing Facility at 100 Freedom<br>Court, Elyria, Ohio 44035.                       |          |
| 3.    Option for LLC to Acquire Real Property<br>described in B.2 above.                                 |          |
| 4.    Fee Simple Interest in Real Property at Calvert<br>City, Kentucky (Legal Description at BFG. B.3). |          |
| C. <u>Inventories</u>  | \$ _____ |
| 1.    DCPD Monomer<br>(See list at BFG. C.1)   |          |
| 2.    Telene®<br>(See list at BFG. C.1)  |          |
| D. <u>Equipment</u>  | \$ _____ |
| 1.    Located at Brecksville, Ohio<br>(See list at BFG. D.1).  |          |
| 2.    Located at Elyria, Ohio<br>(See list at BFG. D.2).   |          |
| 3.    Located at Calvert City, Kentucky<br>(See list at BFG. D.3).                                       |          |
| E. <u>Option to Purchase Telenor Business in Europe</u>  | \$ _____ |
| F. <u>Other Tangible Assets</u>  | \$ _____ |
| (See list at BFG. E)   |          |



Notwithstanding anything in the Operating Agreement or in the Schedules thereto, BFG shall not contribute to the Company any accounts receivable generated by The B.F. Goodrich Company or any of its Affiliates.

## SCHEDULE B

### Ancillary Agreements

1.    a.    License between BFG and APT, LLC, dated \_\_\_\_\_, 2000, relating to the CMS technology.  
      b.    License between BFG and APT, LLC, dated \_\_\_\_\_, 2000, relating to the APRIMA technology.
2.    Brecksville R&D Facility License
3.    Elyria Facility Lease
4.    Supply Agreement
5.    Bills of Sale and General Assignments
6.    Administrative Services Agreement
7.    HS&E Services Agreement
8.    a.    Quit-Claim Deed  
      b.    Easements
9.    Plant Services Agreement
10.   Environmental Services Agreement
11.   Promissory Note to Nelson Abell
12.   Letter Re: Payment of Amounts Due
13.   Bylaws of APT, LLC

**APT, INC.**

**Schedule A.1**

<b>ADVANCED POLYMER TECHNOLOGIES, INC.</b> <b>PATENTS &amp; PATENT APPLICATIONS</b>				
<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
U.S. Patent No. 5,939,504	ADPO-110	12/02/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
HK Serial No. 99102874.9	ADPO-110 HK	07/06/99	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
VNM Serial No. S19980474	ADPO-110 VNM	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
SGP Serial No. 9803245-1	ADPO-110 SGP	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
KOR Serial No. 704209/1998	ADPO-110 KOR	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
JPN Serial No. 09-521364	ADPO-110 JPN	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
EPC Serial No. 96943557.7	ADPO 110 EPC	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
CHN Serial No. 96199826.1	ADPO-110 CHN	12/03/96	Method For Extending The Pot Life Of An Olefin Metathesis Polymerization Reaction	Woodson & Grubbs
U.S. Serial No. 09/130,586	ADPO-120	08/07/98	Fiber Reinforced Poly-Dcpd Composites	Woodson & Grubbs
U.S. Serial No. 08/796,865	ADPO-220	02/06/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
VNM Serial No. S19980634	ADPO-220 VNM	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
SGP Serial No. 9804457.1	ADPO-220 SGP	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs

ADVANCED POLYMER TECHNOLOGIES, INC.				
PATENTS & PATENT APPLICATIONS				
Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
KOR Serial No. 706087/1998	ADPO-220 KOR	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
JPN Serial No. 09-528720	ADPO-220 JPN	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
EPC Serial No. 97906543.0	ADPO-220 EPC	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
CHN Serial No. 97193507.6	ADPO-220 CHN	02/07/97	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
HK Serial No. 99104548.1	ADPO-220 HK	10/14/99	Polymerization Of Low Grade Dcpd Monomers Using An Olefin Metathesis Catalyst	Woodson & Grubbs
U.S. Serial No. 09/369,051	ADPO-1510	08/04/99	Rocket Fuels Based On Metal Hydrides And Poly-Dcpd	Humble, Woodson & Grubbs
PCT/US99/17720	ADPO-1510 PCT	08/05/99	Rocket Fuels Based On Metal Hydrides And Poly-Dcpd	Humble, Woodson & Grubbs
U.S. Serial No. 09/453,020	ADPO-2910	12/02/99	Fluorinated Polymers And Methods For Their Preparation	Woodson, Hillmyer, Grubbs, Lodge & Ren
PCT/US99/26034	ADPO-2910 PCT	12/02/99	Fluorinated Polymers And Methods For Their Preparation	Woodson, Hillmyer, Grubbs, Lodge & Ren
U.S. Serial No. 09/498,120	ADPO-3110	02/04/00	Polyolefin Compositions Having Enhanced Ultraviolet And Oxidative Resistance And Methods For Their Production And Use	Giardello, Cruce, Thibault & Eakin
PCT/US00/03000	ADPO-3110 PCT	02/04/00	Polyolefin Compositions Having Enhanced Ultraviolet And Oxidative Resistance And Methods For Their Production And Use	Giardello, Cruce, Thibault & Eakin

**ADVANCED POLYMER TECHNOLOGIES, INC.****PATENTS & PATENT APPLICATIONS**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
U.S. Serial No. 60/142,713	ADPO-3700	07/07/99	Romp Reactions Using Imidazolidine-Cased Metal Carbene Metathesis Catalysts	Woodson, Giardello, Cruce, Scholl & Grubbs

**ADVANCED POLYMER TECHNOLOGIES, INC.**  
**A. O. SMITH PATENTS & PATENT APPLICATIONS**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
U.S. Serial No. 09/148,654	ADPO-1000	09/04/98	Metathesis Polymerized Olefin Articles Containg Flame Retarding Agents	Warner & Giardello
U.S. Serial No. 09/148,459	ADPO-1100	09/04/98	Metathesis Polymerized Olefin Composites Including Sized Reinforcement Material	Warner, Drake & Giardello
PCT/US98/18473	ADPO-1100 PCT	09/04/98	Metathesis Polymerized Olefin Composites Including Sized Reinforcement Material	Warner, Drake & Giardello

**ADVANCED POLYMER TECHNOLOGIES, INC.**  
**MATERIA PATENTS & PATENT APPLICATIONS**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
U.S. Serial No. 09/312,811	ASM-110	05/17/99	Polyolefin Compositions Optionally Having Variable Toughness And/Or Hardness	Giardello & Lasch
PCT/US99/10910	ASM-110 PCT	05/18/99	Polyolefin Compositions Optionally Having Variable Density, Hardness, And/Or Toughness And Methods For Their Production And Use	Giardello, Lasch, Cruce & Macleod
U.S. Serial No. 09/497,950	ASM-310	02/04/00	Polyolefin Compositions Having Variable Density Modulators And Methods For Their Production And Use	Giardello, Lasch, Cruce, Macleod & Haar
PCT/US00/02919	ASM-310 PCT	02/04/00	Polyolefin Compositions Having Variable Density, Hardness, And/Or Toughness And Methods For Their Production And Use	Giardello, Lasch, Cruce, Macleod & Haar
U.S. Serial No. 09/497,741	ASM-410	02/04/00	Metathesis-Active Adhesion Agents And Methods For Enhancing Polymer Adhesion To Surfaces	Giardello & Haar
PCT/US00/03002	ASM-410 PCT	02/04/00	Metathesis-Active Adhesion Agents And Methods For Enhancing Polymer Adhesion To Surfaces	Giardello & Haar

**ADVANCED POLYMER TECHNOLOGIES, INC.****UNIVERSITY OF NEW ORLEANS PATENTS & PATENT APPLICATIONS**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
U.S. Serial No. 09/392,869		09/--/99	Catalyst Complex With Carbene Ligands	Nolan & Huang
PCT/US99/		09/--/99	Catalyst Complex With Carbene Ligands	Nolan & Huang
U.S. Serial No. 60/151,364	ADPO-3600	08/30/99	Solid State Laser-Dye Materials And Methods For Using The Same	Trudell & Nolan



ADVANCED POLYMER TECHNOLOGIES, INC.				
CALIFORNIA INSTITUTE OF TECHNOLOGY PATENTS & PATENT APPLICATIONS				
Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
U.S. Patent No. 5,342,909	CTCH-300 CIT-2123-1	08/13/93	Ruthenium And Osmium Metal Carbon Compounds For Olefin Metathesis Polymerization	Grubbs, Nguyen & Johnson
U.S. Patent No. 5,312,940	CTCH-301 CIT-2123	04/03/92	Ruthenium And Osmium Metal Carbon Compounds For Olefin Metathesis Polymerization	Grubbs, Nguyen & Johnson
U.S. Patent No. 5,969,170	CTCH-317 CIT-2123-2G	05/23/97	High Activity Ruthenium And Osmium Metal Carbene Complexes For Olefin Metathesis Reactions	Grubbs, Nguyen & Johnson
U.S. Patent No. 5,849,851	CTCH-318 CIT-2123-2B1	11/13/97	Romp Of Functionalized Cyclic Olefins Using Ruthenium And Osmium Carbene Complexes	Grubbs, Nguyen & Hillmyer
Australian Patent No. 691645	CTCH-320 AUS CIT-2123-3F	07/28/95	Synthesis Of Ruthenium And Osmium Metal Carbene Complexes For Olefin Methasis Reactions	Grubbs & Nguyen
CAN Serial No. 2196061	CTCH-320 CAN CIT-2123-3F	07/28/95	Synthesis Of Ruthenium And Osmium Metal Carbene Complexes For Olefin Methasis Reactions	Grubbs & Nguyen
EPC Serial No. 95929340.8	CTCH-320 EPC CIT-2123-3F	07/28/95	Synthesis Of Ruthenium And Osmium Metal Carbene Complexes For Olefin Methasis Reactions	Grubbs & Nguyen
JPN Serial No. 08-506676; 10-256943	CTCH-320 JPN CIT-2123-3F	07/28/95	Synthesis Of Ruthenium And Osmium Metal Carbene Complexes For Olefin Methasis Reactions	Grubbs & Nguyen
U.S. Patent No. 5,710,298	CTCH-321	08/30/96	Method Of Preparing Rothenium And Osmium Carbene Complexes	Grubbs, Nguyen & Johnson
U.S. Patent No. 5,831,108	CTCH-1620 CIT-2123-4B	07/31/96	High Metathesis Activity Ruthenium And Osmium Metal Carbene Complexes	Grubbs, Schwab & Nguyen
CHN Serial No. 96197372.2	CTCH-1620 CHN CIT-2123-4F	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab
EPC Serial No. 96926867.1	CTCH-1620 EPC CIT-2123-4 EP	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab
JPN Serial No. 09-508561	CTCH-1620 JPN CIT-2123-4 JP	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab

**ADVANCED POLYMER TECHNOLOGIES, INC.**

**CALIFORNIA INSTITUTE OF TECHNOLOGY PATENTS & PATENT APPLICATIONS**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
KOR Serial No. 700882/ 1998	CTCH-1620 KOR CIT-2123-4 KR	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab
SGP Serial No. 9801852-6	CTCH-1620 SGP CIT-2123-4 SP	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab
VNM Serial No. S19980091	CTCH-1620 VNM CIT-2123-4F	08/01/96	Metathesis-Active Methylidene Ruthenium Complexes	Grubbs & Schwab
U.S. Serial No. 09/007,498	CTCH-1630 CIT-2123-4B1	01/15/98	High Metathesis Activity Ruthenium And Osmium Metal Carbene Complexes	Grubbs, Schwab & Nguyen
U.S. Serial No. 09/399,963	CTCH-1640 CIT-2123-4D2	09/20/99	High Metathesis Activity Ruthenium And Osmium Metal Carbene Complexes	Grubbs, Schwab & Nguyen
U.S. Patent No. 5,728,785	CTCH-1710 CIT-2360	07/02/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
CHN Serial No. 96196514.2	CTCH-1710 CHN CIT-2360 CN	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
EPC Serial No. 96924356.7	CTCH-1710 EPC CIT-2360-F	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
JPN Serial No. 08-521313	CTCH-1710 JPN CIT-2360 JP	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
KOR Serial No. 700068/ 1998	CTCH-1710 KOR CIT-2360 KR	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
SGP Serial No. 9801252-9	CTCH-1710 SGP CIT-2360 SG	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
VNM Serial No. S19971264	CTCH-1710 VNM CIT-2360 VN	07/03/96	Peroxide Crosslinking Of Romp Polymers	Grubbs & Woodson
U.S. Patent No. 5,917,071	CTCH-8610 CIT-2538	11/07/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
U.S. Serial No. 09/253,042	CTCH-8620 CIT-2538-1	02/19/99	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm

**ADVANCED POLYMER TECHNOLOGIES, INC.**

**CALIFORNIA INSTITUTE OF TECHNOLOGY PATENTS & PATENT APPLICATIONS**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>
PCT/US97/ 20390	CTCH-8610 PCT CIT-2538 PCT	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis	Grubbs, Belderrain, Brown & Wilhelm
AUS Serial No. 51736/98	CTCH-8610 AUS CIT-2538 AU	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
CAN Serial No. 2271892	CTCH-8610 CAN CIT-2538 CA	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
CHN Serial No. 97181296.9	CTCH-8610 CHN CIT-2538 CN	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
EPC Serial No. 97946598.6	CTCH-8610 EPC CIT-2538 EP	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
JPN Serial No. 10-521924	CTCH-8610 JPN CIT-2538 JP	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
KOR Serial No. 7004305/ 1999	CTCH-8610 KOR CIT-2538 KR	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
MYS Serial No. P19705485	CTCH-8610 MYS CIT-2538 MY	11/14/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
SGP Serial No. 9902244-4	CTCH-8610 SGP CIT-2538 SG	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
TWN Serial No. 86117084	CTCH-8610 TWN CIT-2538 TW	11/15/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
THA Serial No. 040764	CTCH-8610 THA CIT-2538 TH	11/14/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm

ADVANCED POLYMER TECHNOLOGIES, INC.				
CALIFORNIA INSTITUTE OF TECHNOLOGY PATENTS & PATENT APPLICATIONS				
Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
VNM Serial No.	CTCH-8610 VNM CIT-2538 VN	11/10/97	Synthesis Of Ruthenium Or Osmium Metathesis Catalysts	Grubbs, Belderrain, Brown & Wilhelm
U.S. Serial No. 09/183,025	CTCH-8910 CIT-2704	10/30/98	Acid Activation Of Ruthenium Metathesis Catalysts And Living Romp Metathesis Polymerization In Water	Lynn, Dias, Grubbs & Mohr
PCT/US98/23343	CTCH-8910 PCT CIT-2704 PCT	10/30/98	Acid Activation Of Ruthenium Metathesis Catalysts And Living Romp Metathesis Polymerization In Water	Lynn, Dias, Grubbs & Mohr
U.S. Patent No. 5,977,393	CTCH-9910 CIT-2715	11/12/98	Schiff Base Derivatives Of Ruthenium And Osmium Olefin Metathesis Catalysts	Grubbs, Chang, Jones & Wang
PCT/US98/23259	CTCH-9910 PCT CIT-2715 PCT	11/19/98	Schiff Base Derivatives Of Ruthenium And Osmium Olefin Metathesis Catalysts	Grubbs, Chang, Jones & Wang
U.S. Serial No. 09/358,654	CTCH-10810 CIT-2838	07/26/99	Thermally Initiated Polymerization Of Cyclic Olefins Using Ruthenium Or Osmium Vinylidene Complexes	Grubbs & Wilhelm
U.S. Serial No. 60/135,493	CIT-2993-P	05/24/99	Synthesis Of Ruthenium-Based Olefin Metathesis Catalysts Coordinated With 1,3-Disubstitute 4,5-Dihydro-(4,5-Disubstituted)-Imadazole-2-Ylidene Ligands	Grubbs & Scholl
U.S. Serial No. 60/142,853	CIT-3021-P	07/07/99	Imidazolidine-Based Metal Carbene Metathesis Catalysts	Grubbs & Scholl
U.S. Serial No. 60/127,469	CIT-2960-P	3/31/99 Filed by Fish & Richards	Novel Ruthenium Metal Alkylidene Complexes Coordinated With Triazolylidene Ligands That Exhibit High Olefin Metathesis Activity	Grubbs & Trnka

**ADVANCED POLYMER TECHNOLOGIES, INC.**  
**HITACHI PATENTS & PATENT APPLICATIONS**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
PCT/JP99/02520	-	05/14/99	Resin Composition and Process for Producing Cured Article Using the Same	Aoki, Oshima, Numata, Kikuchi, Kawai, Yusa, Yamazaki, Chu, Tanaka & Inque
PCT/JP99/02164	-	04/23/99	Curable Molding Material and Method for Producing Molded Article	Sasaki, Aihara, Kimura, Yamazaki & Aoki
Japanese App. No. Hei-10-215494	-	07/30/98	A Process for Producing a Molded Product of a Crosslinked Polymer	info not provided
Japanese App. No. Hei-10-216616	-	07/31/98	A Process for Producing a Molded Product of Cycloolefin Polymer	info not provided
Japanese App. No. Hei-10-222512	-	08/6/98	A Process for Producing a Molded Product of a Crosslinked Polymer and a Method of Reinforcement or Repair of Matrix	info not provided
Japanese App. No. Hei-11-051667	-	02/26/99	An Electric/Electronic Part	info not provided
Japanese App. No. Hei-11-051668	-	02/26/99	A Cycloolefin Composition	info not provided
Japanese App. No. Hei-11-051736	-	02/26/99	A Cycloolefin Composition	info not provided
Japanese App. No. Hei-11-111593	-	04/20/99	An Electric/Electronic Part and a Process for Producing the Same	info not provided
Japanese App. No. Hei-11-137924	-	05/19/99	A Polymerization Process and a Polymer	info not provided
Japanese App. No. Hei-11-145073	-	05/25/99	A Process for Preparing a Molded Product	info not provided
Japanese App. No. Hei-11-148117	-	05/27/99	An Adhesive and a Bonding Method	info not provided
Japanese App. No. Hei-11-148121	-	05/27/99	A Polymeric Molded Product Which is Reversibly Shapevariable	info not provided
Japanese App. No. Hei-11-149847	-	05/28/99	A Resin Particle	info not provided

**ADVANCED POLYMER TECHNOLOGIES, INC.**  
**HITACHI PATENTS & PATENT APPLICATIONS**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor
Japanese App. No. Hei-11-149848	-	05/28/99	A Resin Composition	info not provided
Japanese App. No. Hei-11-149849	-	05/28/99	A Process for Preparing a Resin Particle	info not provided
Japanese App. No. Hei-11-150558	-	05/28/99	A Ring-open Polymer of Dicyclopentadiene Having a Functional Group at One End and a Process for Preparing the Same	info not provided
Japanese App. No. Hei-11-244219	-	08/31/99	A Cycloolefin Composition and a Molded Product	info not provided
Japanese App. No. Hei-11-244220	-	08/31/99	A Method of Storing a Metathetical Polymerization Catalyst	info not provided
Japanese App. No. Hei-11-249437	-	09/03/99	A Process for Manufacturing a Copper-clad Laminate	info not provided
Japanese App. No. Hei-11-244221	-	08/31/99	A Flame-retardant Resin Composition	info not provided
Japanese App. No. Hei-11-246902	-	09/01/99	A Metathetical Polymerization Catalyst Fluid	info not provided

## ADVANCED POLYMER TECHNOLOGIES, INC., LICENSE AGREEMENTS

### LICENSING PARTIES

- 1) Advanced Polymer Technologies, Inc., AND Hitachi Chemical Co., Ltd.
- 2) California Institute of Technology, AND Advanced Polymer Technologies, Inc.
- 3) Advanced Polymer Technologies, Inc. AND Smith Fiberglass Products, Inc.
- 4) Advanced Polymer Technologies, Inc. AND Osborne Industries, Inc.
- 5) Advanced Polymer Technologies, Inc. AND Advanced Sports Materials. LLC
- 6) Advanced Polymer Technologies, Inc. AND the University of New Orleans Foundation
- 7) APT, Inc. AND Nelson D. Abell License
- 8) APT Aerospace Inc./APT, Inc. License

AS LICENSEE:~~CONFIDENTIAL~~

## ADVANCED POLYMER TECHNOLOGIES, INC.

LIST OF PATENT APPLICATIONS FOR  
UNIVERSITY OF NEW ORLEANS/NOLAN CASES

February 1, 2000

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Assigned	Status
U.S. Serial No. 60/115,358	ADPO-3200	01/08/99	NOVEL METATHESIS CATALYSTS WITH AS HETEROCYCLIC CARBENE LIGAND AND METHODS FOR THEIR USE	Nolan, Huang	See University of New Orleans License Agreement	Transferred to Fish & Richardson, La Jolla, CA 08/19 99
U.S. Serial No. 60/099,722		09/10/98			See University of New Orleans License Agreement	Responsibility of Fish & Richardson, La Jolla, CA
U.S. Serial No. 09/392,869		09/--/99	CATALYST COMPLEX WITH CARBENE LIGANDS	Nolan, Huang	See University of New Orleans License Agreement	Responsibility of Fish & Richardson, La Jolla, CA
PCT/US99/		09/--/99	CATALYST COMPLEX WITH CARBENE LIGANDS	Nolan, Huang	See University of New Orleans License Agreement	Responsibility of Fish & Richardson, La Jolla, CA
U.S. Serial No. 60/151,364	ADPO-3600	08/30/99	SOLID STATE LASER-DYE MATERIALS AND METHODS FOR USING THE SAME	Trudell, Nolan	See University of New Orleans License Agreement	Non-Provisional application due: 08/30/00



~~CONFIDENTIAL~~

## ADVANCED POLYMER TECHNOLOGIES, INC.

LIST OF PATENT APPLICATIONS FOR  
MATERIA, INC.

February 1, 2000

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Assigned	Status
U.S. Serial No. 60/085,981	ASM-100	05/19/98	DCPD SPORTS EQUIPMENT	Giardello, Lasch	See APT/ Materia License Agreement	Abandoned in lieu of full application See ASM-110
U.S. Serial No. 09/312,811	ASM-110	05/17/99	POLYOLEFIN COMPOSITIONS OPTIONALLY HAVING VARIABLE TOUGHNESS AND/OR HARDNESS	Giardello, Lasch	See APT/ Materia License Agreement	Pending
PCT/US99/ 10910	ASM-110 PCT	05/18/99	POLYOLEFIN COMPOSITIONS OPTIONALLY HAVING VARIABLE DENSITY, HARDNESS, AND/OR TOUGHNESS AND METHODS FOR THEIR PRODUCTION AND USE	Giardello, Lasch, Cruce, Macleod	See APT/ Materia License Agreement	Pending
U.S. Serial No. 60/118865	ASM-300	02/05/99	POLYOLEFIN COMPOSITIONS HAVING VARIABLE DENSITY, HARDNESS, AND/OR TOUGHNESS AND METHODS FOR THEIR PRODUCTION AND USE	Giardello, Lasch, Cruce, Macleod, Harr	See APT/Materia License Agreement	Filed as non- provisional incorporated into ASM-110
U.S. Serial No.	ASM-310		POLYOLEFIN COMPOSITIONS HAVING VARIABLE DENSITY MODULATORS AND METHODS FOR THEIR PRODUCTION AND USE	Giardello, Lasch, Cruce, Macleod, Haar	See APT/ Materia License Agreement	Non-Provisional application due 02-04-00

**CONFIDENTIAL****ADVANCED POLYMER TECHNOLOGIES, INC.****LIST OF PATENT APPLICATIONS FOR  
MATERIA, INC.**

February 1, 2000

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Assigned	Status
PCT-US00/	ASM-310 PCT		POLYOLEFIN COMPOSITIONS HAVING VARIABLE DENSITY, HARDNESS, AND/OR TOUGHNESS AND METHODS FOR THEIR PRODUCTION AND USE	Giardello, Lasch, Cruce, Macleod, Haar	See APT/ Materia License Agreement	Foreign Filing due 02/05/00
U.S. Serial No. 60/118864	ASM-400	02/05/99	METATHESIS-ACTIVE ADHESION AGENTS AND METHODS FOR ENHANCING POLYMER ADHESION TO SURFACES	Giardello, Haar	See APT/ Materia License Agreement	
U.S. Serial No.	ASM-410		METATHESIS-ACTIVE ADHESION AGENTS AND METHODS FOR ENHANCING POLYMER ADHESION TO SURFACES	Giardello, Haar	See APT/ Materia License Agreement	Non-Provisional application due 02/04/00
PCT-US00/	ASM-410 PCT		METATHESIS-ACTIVE ADHESION AGENTS AND METHODS FOR ENHANCING POLYMER ADHESION TO SURFACES	Giardello, Haar	See APT/ Materia License Agreement	Foreign Filing due 02/05/00

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
U.S. Patent No. 5,342,909	CTCH-300 CIT-2123-1	08/13/93	RUTHENIUM AND OSMIUM METAL CARBON COMPOUNDS FOR OLEFIN METATHESIS POLYMERIZATION	Grubbs, Nguyen, Johnson	Issued
U.S. Patent No. 5,312,940	CTCH-301 CIT-2123	04/03/92	RUTHENIUM AND OSMIUM METAL CARBON COMPOUNDS FOR OLEFIN METATHESIS POLYMERIZATION	Grubbs, Nguyen, Johnson	Issued
U.S. Patent No. 5,969,170	CTCH-317 CIT-2123-2G	05/23/97	HIGH ACTIVITY RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES FOR OLEFIN METATHESIS REACTIONS	Grubbs, Nguyen, Johnson	Issued
U.S. Patent No. 5,849,851	CTCH-318 CIT-2123-2B1	11/13/97	ROMP OF FUNCTIONALIZED CYCLIC OLEFINS USING RUTHENIUM AND OSMIUM CARBENE COMPLEXES	Grubbs, Nguyen, Hillmyer	Issued
U.S. Serial No. 08/282,826	CTCH-320 CIT-2123-3	07/29/94	METHOD OF PREPARING RUTHENIUM AND OSMIUM CARBENE COMPLEXES (as amended)	Grubbs, et. al.	Pending
Australian Patent No. 691645	CTCH-320 AUS CIT-2123-3F	07/28/95	SYNTHESIS OF RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES FOR OLEFIN METATHESIS REACTIONS	Grubbs, Nguyen	Issued
CAN Serial No. 2196061	CTCH-320 CAN CIT-2123-3F	07/28/95	SYNTHESIS OF RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES FOR OLEFIN METATHESIS REACTIONS	Grubbs, Nguyen	Entered national phase

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
EPC Serial No. 95929340.8	CTCH-320 EPC  CIT-2123-3F	07/28/95	SYNTHESIS OF RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES FOR OLEFIN METHESIS REACTIONS	Grubbs, Nguyen	Entered national phase
JPN Serial No. 08-506676; 10-256943	CTCH-320 JPN  CIT-2123-3F	07/28/95	SYNTHESIS OF RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES FOR OLEFIN METHESIS REACTIONS	Grubbs, Nguyen	Entered national phase
U.S. Patent No. 5,710,298	CTCH-321	08/30/96	METHOD OF PREPARING RUTHENIUM AND OSMIUM CARBENE COMPLEXES	Grubbs, Nguyen, Johnson Divisional	Issued
U.S. Patent No. 5,831,108	CTCH-1620  CIT-2123-4B	07/31/96	HIGH METATHESIS ACTIVITY RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES	Grubbs, Schwab, Nguyen	Issued
CHN Serial No. 96197372.2	CTCH-1620 CHN  CIT-2123-4F	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase
EPC Serial No. 96926867.1	CTCH-1620 EPC  CIT-2123-4 EP	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase
JPN Serial No. 09-508561	CTCH-1620 JPN  CIT-2123-4 JP	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase
KOR Serial No. 700882/1998	CTCH-1620 KOR  CIT-2123-4 KR	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
SGP Serial No. 9801852-6	CTCH-1620 SGP  CIT-2123-4 SP	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase
VNM Serial No. SI9980091	CTCH-1620 VNM CIT-2123-4F	08/01/96	METATHESIS-ACTIVE METHYLIDENE RUTHENIUM COMPLEXES	Grubbs, Schwab	Entered national phase
U.S. Serial No. 09/007,498	CTCH-1630  CIT-2123-4B1	01/15/98	HIGH METATHESIS ACTIVITY RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES	Grubbs, Schwab, Nguyen	Pending
U.S. Serial No. 09/399,963	CTCH-1640  CIT-2123-4D2	09/20/99	HIGH METATHESIS ACTIVITY RUTHENIUM AND OSMIUM METAL CARBENE COMPLEXES	Grubbs, Schwab, Nguyen	Pending
U.S. Patent No. 5,728,785	CTCH-1710  CIT-2360	07/02/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Issued
CHN Serial No. 96196514.2	CTCH-1710 CHN  CIT-2360 CN	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase
EPC Serial No. 96924356.7	CTCH-1710 EPC  CIT-2360-F	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase
JPN Serial No. 08-521313	CTCH-1710 JPN  CIT-2360 JP	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase
KOR Serial No. 700068/1998	CTCH-1710 KOR  CIT-2360 KR	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
SGP Serial No. 9801252-9	CTCH-1710 SGP  CIT-2360 SG	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase
VNM Serial No. SI9971264	CTCH-1710 VNM  CIT-2360 VN	07/03/96	PEROXIDE CROSSLINKING OF ROMP POLYMERS	Grubbs, Woodson	Entered national phase
U.S. Patent No. 5,917,071	CTCH-8610  CIT-2538	11/07/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Issued
U.S. Serial No. 09/253,042	CTCH-8620  CIT-2538-1	02/19/99	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Issue Fee due 02/08/00
PCT/US97/ 20390	CTCH-8610 PCT  CIT-2538 PCT	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS	Grubbs, Belderrain, Brown & Wilhelm	PCT split due 5/15/99
AUS Serial No. 51736/98	CTCH-8610 AUS  CIT-2538 AU	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending  Exam fee paid 8/11/99
CAN Serial No. 2271892	CTCH-8610 CAN  CIT-2538 CA	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending
CHN Serial No. 97181296.9	CTCH-8610 CHN  CIT-2538 CN	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Examination requested 09/17/99

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
EPC Serial No. 97946598.6	CTCH-8610 EPC  CIT-2538 EP	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending
JPN Serial No. 10-521924	CTCH-8610 JPN  CIT-2538 JP	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending
KOR Serial No. 7004305/1999	CTCH-8610 KOR  CIT-2538 KR	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending
MYS Serial No. P19705485	CTCH-8610 MYS  CIT-2538 MY	11/14/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Non-PCT: Filed per Hitachi's request  Examination fee due 11/14/99
SGP Serial No. 9902244-4	CTCH-8610 SGP  CIT-2538 SG	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending
TWN Serial No. 86117084	CTCH-8610 TWN  CIT-2538 TW	11/15/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Non-PCT: Filed per Hitachi's request
THA Serial No. 040765	CTCH-8610 THA  CIT-2538 TH	11/14/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Non-PCT: Filed per Hitachi's request
VNM Serial No.	CTCH-8610 VNM  CIT-2538 VN	11/10/97	SYNTHESIS OF RUTHENIUM OR OSMIUM METATHESIS CATALYSTS	Grubbs, Belderrain, Brown & Wilhelm	Pending

**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

Patent/ Serial No.	Ref. No.	Filing Date	Title	Inventor	Status
U.S. Serial No. 09/183,025	CTCH-8910  CIT-2704	10/30/98	ACID ACTIVATION OF RUTHENIUM METATHESIS CATALYSTS AND LIVING ROMP METATHESIS POLYMERIZATION IN WATER	Lynn, Dias, Grubbs, & Mohr	Pending
PCT/US98/ 23343	CTCH-8910 PCT  CIT-2704 PCT		ACID ACTIVATION OF RUTHENIUM METATHESIS CATALYSTS AND LIVING ROMP METATHESIS POLYMERIZATION IN WATER	Lynn, Dias, Grubbs, & Mohr	Pending
U.S. Patent No. 5,977,393	CTCH-9910  CIT-2715	11/12/98	SCHIFF BASE DERIVATIVES OF RUTHENIUM AND OSMIUM OLEFIN METATHESIS CATALYSTS	Grubbs, Chang, Jones & Wang	Issued
PCT/US98/ 23259	CTCH-9910 PCT  CIT-2715 PCT	11/19/98	SCHIFF BASE DERIVATIVES OF RUTHENIUM AND OSMIUM OLEFIN METATHESIS CATALYSTS	Grubbs, Chang, Jones & Wang	National Phase Applns. Due 05/20/00
U.S. Serial No. 09/358,654	CTCH-10810  CIT-2838	07/26/99	THERMALLY INITIATED POLYMERIZATION OF CYCLIC OLEFINS USING RUTHENIUM OR OSMIUM VINYLIDENE COMPLEXES	Grubbs, Wilhelm	Pending



**CALIFORNIA INSTITUTE OF TECHNOLOGY: PATENTS AND APPLICATIONS WITH ROBERT GRUBBS AS A  
NAMED INVENTOR**

<b>Patent/ Serial No.</b>	<b>Ref. No.</b>	<b>Filing Date</b>	<b>Title</b>	<b>Inventor</b>	<b>Status</b>
U.S. Serial No. 60/135,493	CIT-2993-P	05/24/99	SYNTHESIS OF RUTHENIUM- BASED OLEFIN METATHESIS CATALYSTS COORDINATED WITH 1,3-DISUBSTITUTE 4,5- DIHYDRO-(4,5- DISUBSTITUTED)-IMADAZOLE- 2-YLIDENE LIGANDS	Grubbs, Scholl	Non-Provisional application due 05/23/00
U.S. Serial No. 60/142,853	CIT-3021-P	07/07/99	IMIDAZOLIDINE-BASED METAL CARBENE METATHESIS CATALYSTS	Grubbs, Scholl	Non-Provisional application due 07/06/00
U.S. Serial No. 60/127,469	CIT-2960-P	3/31/99 Filed by Fish & Richards	NOVEL RUTHENIUM METAL ALKYLIDENE COMPLEXES COORDINATED WITH TRIAZOLYLIDENE LIGANDS THAT EXHIBIT HIGH OLEFIN METATHESIS ACTIVITY	Grubbs, Trnka	Non-Provisional application due 03/31/00

**Schedule A.2**  
**to**  
**Limited Liability Company Agreement**

**Agreements Conveyed**

	Title	Parties	Date of Agreement	Subject Matter
1	Rider to Tank Car Lease and Service Contract	GLNX Corporation ("Supplier") and BFG	November 1, 1999	Tank car lease
2	Master License Agreement	Fisher-Rosemont Systems, Inc. (Supplier") and BFG	May 19, 1994	Software license agreement
3	Custom Processing Agreement	KMTEx and BFG	July 12, 1996	Chemical custom processing service
4	Customer List Agreement	Velsicol Chemical Corporation and BFG	May __, 1998	Sale of customer list

5	BFG Supply Agreement	BFG ("Supplier") and Allmand Industries	May 21, 1999	Telene
6	BFG Supply Agreement	BFG and A.R.E., Inc.	July 13, 1998	Telene
7	BFG Supply Agreement	BFG and Interplastic Corporation	April 27, 1998	DCPD
	BFG Supply Agreement	BFG and The Goodyear Tire & Rubber Company	January 4, 1999	Ultrene
9	BFG Supply Agreement	BFG and KSL Enterprises, Inc.	December 15, 1999	Hydrocarbon Blend Stock
10	BFG Supply Agreement	BFG and OxyTech Systems, Inc.	October 26, 1998	Cell Components from Telene
11	BFG Supply Agreement	BFG and R/L Industries	December 27, 1995	Telene
12	BFG Supply Agreement	BFG and Romeo RIM Inc.	July 12, 1998	Telene
13	BFG Supply Agreement	BFG and Zeftek, Inc.	January 27, 1998	Telene
14	BFG Supply Agreement	BFG and Smith Fiberglass Products Company	April 28, 1999	Ultrene
15	BFG Supply Agreement	BFG and Neville Chemical Company	December 21, 1998	BFG Resin Former
16	BFG Supply Agreements	BFG and Truck Accessory Group, Inc.	January 5, 1999	Telene
17	BFG Supply Agreement	BFG and Velsicol Chemical Corporation	May 21, 1999	Ultrene

6656

HUNTSVILLE ABSTRACT & TITLE  
# 9804569

WLD:em

SPECIAL WARRANTY DEED

Date: September 14, 1998

Grantor: Gibbs Brothers &amp; Company, a Texas Partnership

Grantor's Mailing Address (including county): P. O. Box 711, Huntsville, Walker County, Texas  
77342-0711

Grantee: APT Catalyst, L.L.C.

Grantee's Mailing Address (including county): P. O. Box 7572, Monroe, Ouachita Parish, Louisiana  
71211-7572

Consideration: Ten and no/100 Dollars (\$10.00) and other valuable consideration

## Property (including any improvements):

Tract 1 of GIBBS BROTHERS-RIPLEY ONE, a subdivision in Walker County, Texas, according to the map or plat thereof recorded in Volume 3, Page 49 of the Plat Records of Walker County, Texas.

## Reservations from and Exceptions to Conveyance and Warranty:

1. all building set-back lines, easements and rights-of-way, if any, that affect the property and that are shown on the plat of the property recorded in Volume 3, Page 49 of the Plat Records of Walker County, Texas;
2. for Grantor and Grantor's successors and assigns, a reservation of all the oil, gas and other minerals that are in and under the property and that may be produced from it; and
3. all laws, ordinances and regulations of the United States of America and of the State of Texas, or any political subdivision thereof, including, but not limited to, those of any county, city, village and/or governmental district that affect the property.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in anywise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators, and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through, or under Grantor, but not otherwise.

As part of the consideration for the grant, sale and conveyance of the property by Grantor to Grantee, Grantor does hereby release and waive, on behalf of itself and its successors and assigns, all rights of ingress and egress and all rights of every kind and character whatsoever to enter upon or to use the surface of the property or any part thereof, including without limitation, the right to enter upon the surface of the property for purposes of exploring for, developing, drilling, producing, transporting, mining, treating, storing or any other purpose incident to the development or production of the oil, gas and other minerals in, on and under the property. Nothing contained in the preceding sentence shall ever be construed to prevent Grantor, or its successors and assigns, from developing or producing the oil, gas and other minerals in and under the property by pooling or by directional drilling under the property from well sites located on tracts other than the property.

When the context requires, words of any gender include any other gender, plural words include the singular and singular words include the plural.

GIBBS BROTHERS &amp; COMPANY

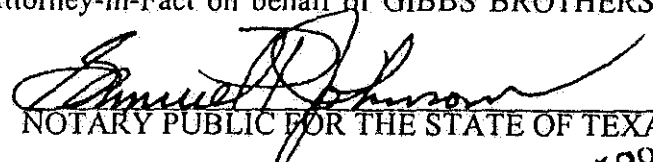
BY:

  
 EDWIN G. SANDHOP, JR.  
 Agent and Attorney-in-Fact

THE STATE OF TEXAS §

COUNTY OF WALKER §

This instrument was acknowledged before me on the 14<sup>th</sup> day of September, 1998, by EDWIN G. SANDHOP, JR., Agent and Attorney-in-Fact on behalf of GIBBS BROTHERS & COMPANY, a Texas Partnership.


  
 NOTARY PUBLIC FOR THE STATE OF TEXAS

VOL. 3 PAGE 529

APT Catalyst, L.L.C. accepts this Special Warranty Deed and agrees to and approves all of the terms and provisions set forth in it.

APT CATALYST, A.L.C.

BY:

Name: \_\_\_\_\_

**Title:**

COUNTY OF WALKER §

A circular notary seal for Samuel P. Johnson, a Notary Public in the State of Texas. The seal features a five-pointed star in the center. The text "SAMUEL P. JOHNSON" is written along the top inner edge, "NOTARY PUBLIC" along the right inner edge, and "STATE OF TEXAS" along the bottom inner edge. The commission expiration date "07-29-2002" is written along the left inner edge. The entire seal is surrounded by a decorative border of small, repeating patterns.

NOTARY PUBLIC FOR THE STATE OF TEXAS

Return to:  
APT Catalyst, L.L.C.  
P. O. Box 7572  
Monroe, Louisiana 71211-7572

'98 SEP 18 PM 4 27

JAMES D. PATTON  
DEPUTY *J. McNeill*

THE STATE OF TEXAS  
COUNTY OF WALKER

I, James D Patton, County Clerk for Tarrant County, Texas do hereby certify that the foregoing was filed for record in the Public Record Office of Tarrant County, Texas, in the name of the named record and at the time and place thereon by me.



JAMES D. ARNOLD, JR.  
WALKER COUNTY, TEXAS

OFFICIAL PUBLIC RECORD

## **CUSTOM MANUFACTURING AGREEMENT**

THIS AGREEMENT dated as of the 1st day of August, 2000, by and between Cedar Chemical Corporation, a Delaware Corporation having offices at 5100 Poplar Avenue, Memphis, Tennessee 38137 (hereinafter called "Cedar") and APT, LLC, a limited liability company, a joint venture between Advanced Polymer Technology, LLC of Texas and B.F. Goodrich Company, having offices at 7629 State Highway 75 South, Huntsville, Texas 77340 (hereinafter called "APT").

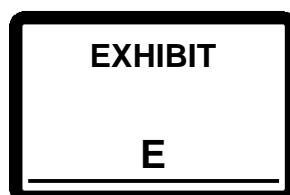
### **WITNESSETH:**

WHEREAS, APT desires to have Cedar manufacture dicyclopentadiene ("DCPD") comonomer formulations for APT, using APT's proprietary information, and meeting the specifications attached hereto and made a part hereof as Exhibit A (hereinafter called the "Products");

WHEREAS, Cedar has experience manufacturing Products on behalf of B.F. Goodrich Company pursuant to a custom manufacturing agreement between it and Cedar dated July 2, 1990, as subsequently amended, which agreement Cedar and B.F. Goodrich Company have terminated at the request of B.F. Goodrich Company in order for Cedar to be able to enter into and perform this Agreement; and

WHEREAS, Cedar is willing to convert, at Cedar's facility located in West Helena, Arkansas (the "Facility") DCPD and other raw materials furnished by APT ("Raw Materials") into Product exclusively for APT, upon the terms and conditions hereinafter provided.

NOW, THEREFORE, in consideration of the premises and the mutual agreements set forth herein, the parties agree as follows:



1. Definitions. For purposes of this Agreement, the following terms shall have the following meanings assigned thereto:
  - 1.1 "Raw Materials" shall mean those materials described, and meeting the specifications contained, in Exhibit B attached hereto.
  - 1.2 "Plant" shall mean that portion of Manufacturing Unit Number 1 located at Cedar's Facility more particularly identified in Exhibit C attached hereto, which shall be dedicated to the production of Product hereunder.
  - 1.3 "Process" shall mean the proprietary manufacturing process furnished by APT to Cedar identified in Exhibit D attached hereto which Process, together with any amendments and revisions thereto which the parties shall adopt by mutual agreement shall be used by Cedar in the manufacture of Products hereunder.
  - 1.4 "Term" shall mean that twelve (12) month period commencing as of the effective date of this Agreement and terminating on July 31, 2001. The Term of this Agreement shall be automatically extended to February 28<sup>th</sup>, 2002 unless either party shall elect to terminate the agreement by written notice to the other by February 28<sup>th</sup>, 2001. After the February 28<sup>th</sup>, 2001 dead line has passed, provided neither party has terminated the agreement, the contract will be converted from a fixed term to a rolling 12 month agreement. (I.e. either party may elect to terminate the Agreement by written notice to the other, given at least twelve (12)

months notice prior to the cancellation of the agreements extended term.)

2. Method of Operation.

- 2.1 APT shall furnish Cedar with or cause it to be furnished with Raw Materials meeting the specifications attached hereto as Exhibit B in such amounts as shall be sufficient to enable Cedar to produce at the Plant those quantities of Products ordered by APT hereunder from time to time during the Term of this Agreement. APT shall make available to Cedar, during initial startup of production hereunder, the personnel sufficiently skilled in the use of the Process to assist in the transfer of its technology to Cedar's personnel.
- 2.2 Throughout the term of this Agreement, Cedar shall make its best efforts to produce all quantities of Products ordered by APT meeting the specifications attached hereto as Exhibit A, from Raw Materials supplied by APT, at an estimated reliable production rate of 1,000,000 pound of Products per thirty (30) day month. In order to meet its responsibilities hereunder, Cedar will be responsible for providing up to two operators per shift. Any additional staffing requirements hereunder which shall be requested by APT and implemented by Cedar shall require an increase in the Plant Fee, as defined in Section 6.2, which increase the parties shall make their best good faith efforts to negotiate.

- 2.3 Cedar shall perform, at its own expense, Raw Material quality control testing in process, quality control testing, finished Product quality control testing and waste material testing. The quality control testing procedures to be utilized by Cedar shall be in accordance with Exhibit E attached hereto, which may be modified from time to time by mutual agreement of the parties. Cedar shall provide written quality control reports demonstrating whether Products manufactured for APT hereunder meet the specifications set forth in Exhibit A concurrent with shipment of Products to APT.
- 2.4 Cedar will provide warehouse space adjacent to Cedar's Plant sufficient for storage of Raw Materials required for up to two (2) weeks of production of Products scheduled hereunder.
- 2.5 Cedar shall load all Products produced hereunder in drums supplied by APT, and shall deliver said Products to APT via trucks arranged by APT, to Blackhawk Warehousing and Leasing Company for storage in facilities adjacent to the Plant, or to such other offsite facilities as APT shall select upon notice to Cedar.
- 2.6 Cedar shall supply at its own expense materials and supplies (other than Raw Materials, labeling and packaging supplies, laboratory supplies, and process consumables such as filters, ceramic beads and similar items, all to be furnished by APT at its cost) and all labor, energy, non-hazardous aqueous waste (storm water and wash water) treatment, and utilities (including air, nitrogen and water) as shall be



required to convert Raw Materials into Products, utilizing the Process identified in Exhibit D.

2.7 Cedar will dispose of waste generated by the conversion process off-site (except for such non-hazardous waste as described in paragraph 2.6) at such locations and in such manner as shall be approved by APT and by Cedar, and at APT's sole cost and expense, it being agreed that the parties shall select the most economical methods of waste disposal available consistent with sound environmental practice.

2.8 Cedar shall be solely responsible for maintaining the Plant exclusively for the production of Products for APT during the term hereof. Cedar shall also be responsible for installing such equipment as shall be required to operate the Plant separate and independent of any other manufacturing operations to be conducted in Manufacturing Unit Number 1.

3. Scheduling.

3.1 APT will give Cedar a rolling one year forecast of its anticipated manufacturing requirements by total volume, revised monthly. Subject to availability of Raw Materials to be supplied by APT, Cedar will produce Products for APT in accordance with APT's detailed monthly schedules supplied to Cedar at least one (1) month prior to the applicable production month (which schedules shall include in each case the quantity of each Product required, with production

codes, batches and batch numbers, and preferred order of production.)

4. Title and Risk of Loss:

4.1 Title to the Raw Materials delivered by APT or supplied to Cedar on APT's behalf shall at all times remain solely in APT; said Raw Materials and the Products shall be segregated from other materials and goods of Cedar; and Cedar shall take such other steps as APT shall reasonably request so as to indicate APT's title to said Raw Materials and the Products.

4.2 The risk of loss of Raw Materials delivered by APT or its suppliers shall remain with APT until delivery of said Raw Materials to the Plant and Cedar's acceptance thereof. Cedar shall not be deemed to have accepted Raw Materials if it promptly notifies APT that such Raw Materials fail to meet the specifications set forth in Exhibit B hereto.

Cedar shall bear the risk of loss of all Raw Materials and Products while in its possession and control unless and to the extent loss or liability results from APT's negligence. Cedar shall not be liable for economic, incidental or consequential damages, such as business interruption or lost profits incurred by APT due to a loss of Raw Materials or Products. Cedar shall maintain insurance in appropriate

form and amount in accordance with industry standards covering the Raw Materials and the Products.

- 4.3 The risk of loss of Products produced hereunder and Raw Materials delivered to APT hereunder shall shift to APT upon delivery of same to common carrier, at the Plant, incident to delivery to APT's offsite warehouse location selected by APT in accordance with paragraph 2.5 or to APT or its customers.

5. Product Quality.

- 5.1 Beginning with the first day of production following the successful conclusion of the startup of the first manufacturing campaign hereunder, Cedar warrants that the Products produced hereunder shall meet the specifications attached hereto as Exhibit A. CEDAR MAKES NO OTHER WARRANTY WITH RESPECT TO THE PRODUCTS, WHETHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NONE SHALL BE IMPLIED. To determine whether Products produced hereunder meet the specifications attached hereto as Exhibit A, Cedar shall comply with the test methods and sample retention and disposition procedures specified in Exhibit E attached hereto.

6. Production and Fees.

- 6.1 Cedar shall maintain and operate the Plant for production of Products ordered by APT in accordance with the terms hereof in continuous five or seven day week, twenty-four hour per day campaigns.

- 6.2 APT agrees to pay Cedar those fees specified in Schedule 6.2 attached hereto monthly in arrears (the "Plant Fee"), the first such monthly Plant Fee to be due and payable on the 1st day of September, 2000 and monthly thereafter on the 1st day of each succeeding month during the Term hereof. The Plant Fee shall be prorated in any month in which Cedar fails to produce the quantity of Products ordered by APT in accordance with Section 3.1 of this Agreement. The requested production that is subject to the prorated fee is not to exceed a maximum of 1,000,000 pounds. (The actual metric used to determine if a reduction in fee is warranted will be 65% of the plants theoretical capacity based on the requested product mix, the best demonstrated month in the run to date or 1,000,000 which ever is less. Product mix must be considered when determining the plants capacity and any prorated reduction of the fee. ) unless such inability to produce the quantity ordered shall have been caused by APT's failure to supply Cedar with sufficient quantities of Raw Materials meeting the agreed specifications, failure to comply with its other obligations hereunder, or otherwise shall have been caused by changes in the process or other revisions requested by APT.
- 6.3 Cedar shall pay all waste disposal costs incurred by Cedar for which APT is responsible, together with any other costs incurred by Cedar at APT's request, such costs to be invoiced by Cedar at the end of

each month during the term hereof, which invoices shall be due and payable thirty (30) days from the date of invoice.

- 6.4 Effective on the first day of January 2002 and each succeeding year during the term hereof, the Plant Fee shall be adjusted in accordance with the formula attached hereto as Exhibit F.

7. Audit.

- 7.1 APT representatives shall have the right to audit the production records of Cedar including laboratory testing records and procedures applicable solely to Products produced for APT; to physically inspect the conversion operation; and to physically inventory Raw Materials and Products in Cedar's possession during regular business hours following reasonable notice.

8. Force Majeure. (please note that as written Force Majeure is an option for APT except for raw material supply)

- 8.1 Neither party shall be liable for its failure to perform hereunder due to any occurrence beyond its reasonable control including acts of God, fire, floods, war, sabotage, labor disputes, governmental laws, ordinances, rules and regulations, and any other similar occurrence; provided, however, APT's obligation to pay the monthly Plant Fee hereunder shall not be relieved or suspended by APT's inability to supply Cedar with Raw Materials. The party whose performance is prevented by any such occurrence shall notify the other party thereof in writing as soon as is reasonably possible after the commencement

of such occurrence and shall promptly give written notice to the other party of the cessation of such occurrence. The party affected by such occurrence shall use its best efforts to remedy or remove such event of Force Majeure as expeditiously as possible.

9. Ownership of Technology and Confidentiality.

- 9.1 Title to and ownership of all technology and confidential information concerning the Process, including all such information supplied to APT by B.F. Goodrich Company (the "APT Information") shall remain in APT. Cedar shall receive and hold the APT Information in confidence; shall not disclose it to any third party; and shall use it solely in carrying out its duties under this Agreement. Cedar shall limit disclosure of the APT Information to those of its employees and contractors who have a need to know the information, and then only to such persons who shall have executed a written agreement obligating themselves to maintain the APT Information in confidence.
- 9.2 The obligations of confidentiality imposed upon Cedar hereunder with respect to the APT Information shall remain in effect during the entire term of this Agreement and for a period of ten (10) years following the termination of the Agreement. The foregoing notwithstanding, Cedar's obligations of secrecy and confidentiality shall not apply to any information (a) which Cedar can prove by written documents was already known to it at the time of disclosure to Cedar and was not obtained directly or indirectly from APT; (b) which is in the public

domain which is public knowledge or becomes public knowledge or is published through no fault of Cedar; or (c) which is disclosed to Cedar by a third party who is under no obligation to APT, directly or indirectly, with respect to such information.

10. Indemnification.

10.1 Cedar agrees to hold APT harmless from and to indemnify it against all loss, costs, damages, liability and expense (including reasonable attorneys' fees) on account of death, personal injury or property damage that results from or is related to an occurrence involving Cedar's handling or storage of Raw Materials or Cedar's manufacture, handling, storage or delivery to the carrier of the Products during periods when such Raw Materials or the Products are in Cedar's possession or control, unless and to the extent caused by APT's negligence.

10.2 APT agrees to hold Cedar harmless from and to indemnify it against all loss, costs, damages, liability and expense (including reasonably attorneys' fees) on account of death, personal injury or property damage that results from or is related to occurrences involving the handling, storage, transportation, sale or use of Raw Materials delivered to Cedar hereunder and of Products produced by Cedar hereunder when such Raw Materials and Products are not in Cedar's possession and control, unless and to the extent caused by Cedar's negligence.

11. Default.

11.1 Subject to the provisions of Paragraph 8 (Force Majeure), if either party hereto shall fail to perform or fulfill at any time and in the manner herein provided any obligation or condition required to be performed or fulfilled by such party hereunder, and if such party fails to remedy any such failure within thirty (30) days after receiving written notice thereof from the nondefaulting party, the nondefaulting party shall have the right to terminate this Agreement by giving written notice of immediate termination to the party in default.

12. Liquidated Damages.

12.1 In the event this Agreement should be terminated prior to the end of the initial term or of any extended term hereof for any reason other than default by Cedar, it is agreed that Cedar's damages in such event shall be fixed in an amount equal to the present value of the aggregate Plant Fees that would have been payable during the remaining term of the Agreement (based upon the monthly Plant Fees payable as of the effective date of termination) based upon a discount rate of nine (9%) percent per annum, which sum shall be due and payable to Cedar by APT within thirty (30) days following the effective date of termination .

13. Notices.

13.1 All notices and reports shall be sent to the receiving party at:



If to Cedar: Cedar Chemical Corporation  
24th Floor  
5100 Poplar Avenue  
Memphis, Tennessee 38137

Attn: \_\_\_\_\_

If to APT: APT  
7629 State Highway 75 South  
Huntsville, Texas 77340

Attn: \_\_\_\_\_

All notices to be given by either party to the other pursuant to any of the terms of this Agreement shall be forwarded by overnight mail or courier service and shall be deemed to have been given on the date following the posting thereof.

14. Miscellaneous.

14.1 If either party finds it convenient to employ its standard forms of purchase order or acknowledgment of purchase order in administering the terms of this Agreement, it may do so, but none of the terms and conditions printed or otherwise appearing in such forms shall be applicable except to the extent that they are consistent with the terms hereof.

14.2 Neither party may assign its rights or obligations hereunder without the prior written consent of the other party hereto. In the event that substantially all of the assets or control over a majority of the outstanding capital stock of Cedar should be acquired by a third party

(the "Acquiring Party") during the term hereof, Cedar shall promptly notify APT of such event and identity of the Acquiring Party. In such event, if APT reasonably and in good faith believes that the Acquiring Party's ownership or control of Cedar would adversely impact its business or otherwise place it at a competitive disadvantage *vis a vis* the Acquiring Party, APT shall be entitled to terminate this Agreement upon notice to Cedar given within thirty (30) days following Cedar's notice to APT of such event.

14.3 This Agreement constitutes the entire agreement between the parties with regard to the matters contained herein and there are no understandings or agreements express or implied not expressly set forth herein except for that Termination Agreement of even date herewith between Cedar and B.F. Goodrich Company. No modification of this Agreement or waiver of any of its provisions shall be effective unless it is in writing and signed by the party to be bound thereby. Neither party's waiver of any breach of any of the provisions of this Agreement shall be deemed to be a waiver of any subsequent breach of the same nature or any breach of a different nature.

14.4 This Agreement shall be binding upon and ensure to the benefit of the parties and their respective successors and duly authorized assigns.

14.5 This Agreement shall be governed by the laws of the State of Tennessee.

IN WITNESS WHEREOF, Cedar and APT have caused this Agreement to be executed by their duly authorized representatives as of the date first appearing above.

CEDAR CHEMICAL CORPORATION

By: \_\_\_\_\_

Its: \_\_\_\_\_

APT, LLC

By: \_\_\_\_\_

Its: \_\_\_\_\_

# Plant Fee Schedule

Month	Fee
August, 00	\$200,000
September, 00	\$200,000
October, 00	\$200,000
November, 00	\$200,000
December, 00	\$200,000
January, 01	\$225,000
February, 01	\$225,000
March, 01	\$225,000
April, 01	\$225,000
May, 01	\$225,000
June, 01	\$225,000
July, 01	\$225,000
August, 01	\$225,000
September, 01	\$225,000
October, 01	\$225,000
November, 01	\$225,000
December, 01	\$225,000

Exhibit F.

**Fee Adjustment Formula**

The manufacturing fee of \$225,000 per month will be adjusted on January 1, 2002 and each January 1 during the term of the agreement in accordance with the following formula:

$$Pa = 225,000 [0.5 (ECI_a / ECI_o) + 0.5 (CPI_n / CPI_o)]$$

Where:

$Pa$  = adjusted fee in \$ / Month

$ECI_a$  = Employment Cost Index published by the US Bureau of Labor Statistics for the month of September immediately preceding the date of adjustment.

$ECI_o$  = Employment Cost Index for September 2000.

$CPI_n$  = The Consumer Price Index published by the US Bureau of Labor Statistics for the month of September immediately preceding the date of adjustment.

$CPI_o$  = The Consumer Price Index for the month of September 2000.

CEDAR INTERNAL CORRESPONDENCE

DATE: 03/23/90

TO: John Miles

FROM: Geoffrey Pratt

CC: T. Lodice R. Tomblin  
J. Porter N. Robbins  
W. Eissler

SUBJECT: B.F. Goodrich  
Project

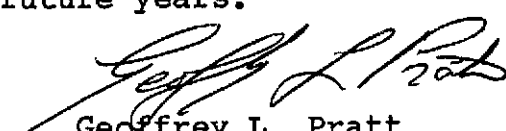
To confirm our conversation of yesterday, the B.F. Goodrich project is confirmed for a trial run to begin June 1, 1990. The trial will be for 20M lbs. of monomers and will be priced at \$10M per day with a \$100M minimum. BFG will pay a plant modification fee of up to \$40M based upon our prior estimates.

Attached is a letter of intent which establishes the procedure for obtaining BFG approval for the plant modifications. You will note that final approval from BFG will be based on us submitting a breakdown of the proposed modifications, thus the ball is in our court. BFG is willing to meet with us at any time either at West Helena or Brecksville to review the project and/or allow us to witness their pilot trials. We need to let them know our needs in this area.

You and Tom expressed concern regarding our ability to handle the project in view of the higher level of attention than anticipated for the Grace project, and the DCA construction project. I understand you are authorized to use outside engineering help and suggest that if this is the route you choose, you include any incremental costs in the modification estimate.

I do not expect this project to contribute greatly to our revenue in 1990, and most likely will entail one additional scale-up run in the Fall.

However, BFG indicates that they have made no commitment to build their own plant beyond the three year term of the contract (under negotiation) and that this project could be an important contribution in future years.

  
Geoffrey L. Pratt

EXHIBIT

F

AB0000083987/1

# BFGoodrich

The BFGoodrich Company  
Research & Development Center  
9921 Brecksville Road  
Brecksville, Ohio 44141  
216-447-5000

3-8-90

G. PRATT

FYI

March 5, 1990

Mr. Geoffrey Pratt  
Cedar Chemicals Corp.  
24th Floor  
5100 Poplar Avenue  
Memphis, TN 38137

Dear Geoff:

BFGoodrich (BFG) and Cedar Chemicals Corp. (Cedar) have exchanged technical information on the manufacturing of Telene® RIM formulations (product) based on our signed secrecy agreement. BFG believes Cedar has the equipment and people to toll manufacture product for BFG. Cedar is interested in this project and will make the product for BFG.

## General Intent

- BFG and Cedar intend to develop a contract for Cedar to toll manufacture product for BFG. The first draft of said contract which was developed by BFG based on documentation by both parties is being reviewed by Cedar. Negotiation of this contract should be completed in the next 30 days.
- BFG, by this letter of intent, approves the expenditure of up to \$40,000 in equipment modifications for the trial run of product in Cedar's Unit #1 of the West Helena, Arkansas plant. BFG will make a final approval on a detailed list of proposed modifications prior to actual commitment of monies on said modifications. BFG desires and Cedar will make best efforts to begin the production trial in their Unit #1 of the West Helena, Arkansas plant for BFG by 5/1/90. BFG will allow up to 31 days (6/1/90) for Cedar to begin this trial based on previous commitments (or options) on the plant to other Cedar customers.

Page 2

This statement represents a letter of intent and is not legally binding. Both parties intend to adhere to it and work with best efforts to develop a formal contract.

If the above is acceptable, please sign below and return one original to Mark Ackerman.

Sincerely,

The BFGoodrich Company  
SP&C Division

By:

  
John Weaver

Date:

March 6, 1990

Accepted and agreed on behalf of Cedar:

By:

Typed:

  
William J. Eissler, Jr.

Vice President & General Manager

Title:

Organic Chemicals

Date:

March 8, 1990

gpcc3.5/hg

AB0000083987/





5100 Poplar Avenue • Suite 2414 • Memphis, TN 38137 • (901) 685-5348 • Fax (901) 684-5398

November 20, 1997

Mr. Jean-Pierre Verbeeck  
B.F. Goodrich Specialty Chemicals  
9911 Brecksville Road  
Cleveland, OH 44141-3247

Dear Jean-Pierre:

In our discussion of your November 13, 1997, letter regarding Cedar's commitment to produce BFG's 1998 requirements, I indicated that in principle I agree to the elements contained in your letter. However, you request "Cedar's more explicit commitment to produce the defined 1998 Telene forecast" and I think it is important to breakdown Cedar's commitment into its elements to reduce any possibility for misunderstanding. Accordingly, I have reproduced the paragraphs in your November 13, 1997, letter but have modified certain of them to clarify Cedar's position. My signature at the end of this letter confirms Cedar's commitment to the items as modified.

- Cedar is drafting the long term contract. Our 1998 capital expense commitment will depend upon BFG's long term intention.
  - The goal is to have this contract in place by year end. The initial draft of the contract is under review and we will send it to you in a few days..
  - I do consider my letter of November 1997 as a commitment relative to the 1998 production subject to clarification of certain terms
1. Cedar will commit to provide production time commencing June 1, 1998, and running through September 30, 1998, for certain. An additional period through October 31, 1998, can be made available if necessary to produce the stated requirement of 7.5MM lbs. +/- 10%, with a maximum of 15% slow product. There is no time available beyond October 31, whatever the production status is at that time. Cedar is targeting to produce your required amount within a four month period and, in my letter of November 4, 1997, I established needs which must be provided by both Cedar and BFG in order to reach this goal. The additional month of production time is intended as a safety factor to offset any events which are unanticipated. It is not intended to be a remedial period for loss of production due to any items which could have been anticipated or prevented by BFG. This applies particularly to the supply of raw materials. The extra month is also not available to produce product above the above stated quantity.
  2. A written justification for the increase in per diem fee to \$15,000/day has been sent to you.
  3. Cedar would agree to a minimal output per day but wonders if this is really helpful to BFG. Would a cap on processing cost make more sense (say 30¢/lb.)? We agree that the previous year average

EXHIBIT

G

production rate should be the reference for the following year, and that our target is to have an average processing cost to BFG in the low to mid 20's. In order for Cedar to commit to these constraints it will be necessary that allowance be made for actions which BFG might take in terms of changing the product mix, or the processing in order to allow you the flexibility that you may need. The transfer principles from per diem to unit price are in the original Telene Contract.

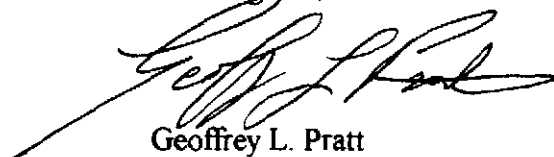
4. After signing the contract extension Cedar will begin the process of hiring additional permanent employees to be available for the BFG production run. We will cooperate with BFG in defining the minimal training and experience levels, but it should be clear that this is subject to available skills in the applicant market and that Cedar must balance its experience and skills throughout all of its operations without giving undo preference to BFG. We do not understand the commitment to have the minimum number of employees per shift available throughout the Telene run, but assume that you mean that once an adequate team has been assembled and trained that they will remain assigned to the BFG production.
- The issue of converting from a per diem to a fixed fee is covered in the previous contracts and BFG has always had this option assuming that the fixed fee is based upon demonstrated capabilities.

I understand that December 9 has been established for Cedar's production/technical staff to meet with appropriate BFG representatives at our plant to review the 1997 run and confirm the feasibility of producing the 1998 Telene requirements in the time that Cedar can make available under the parameters defined in my November 4 letter. Cedar believes that both companies should be satisfied that there is a good chance for success under the conditions we have prescribed.

- For planning purposes, Cedar understands the following forecasted volumes for Telene:
  - 1998, 7.5MM +/- 10%;
  - 1999, 8MM +/- 1MM;
  - 2000, 9MM +/- 2MM;
  - 2001, 11MM +/- 2MM,
  - 2002, 13MM +/- 2MM.

Cedar is prepared to produce these quantities under the terms of a long term contract.

Best Regards,



Geoffrey L. Pratt

GLP/lc

PRATT/BFGOOD VERBEEC3.DOC

**BFGoodrich**  
Specialty Chemicals

BFGoodrich Specialty Chemicals  
9911 Brecksville Road  
Cleveland, Ohio 44141-3247  
800-331-1144  
216-447-5000

RECEIVED

MAY 26 1998

Ans'd.....

*Neil Robben*

May 15, 1998

Mr. Geoffrey Pratt  
Cedar Chemical Corporation  
Suite 2414  
5100 Poplar Ave.  
Memphis, TN 38137

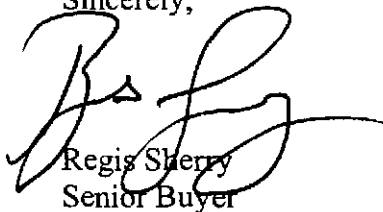
Dear Geoffrey.

Enclosed is the current change order for the 1998 production run. The change order defines our new goal of 10.4 million lbs of material vs. the original quantity of 8.25 million lbs.

Also the change order addresses the other costs associated with the run (Nitrogen, Wastes & Pallets).

Please contact me if you have any questions on this information.

Sincerely,

  
Regis Sherry  
Senior Buyer

cc: Dennis Gunson  
Richard Hillebrand  
Stuart Toner  
Jean Pierre Verbeeck

EXHIBIT

H

AB0000083717/1

## CHANGE ORDER

TRISN 7-1-98

## THE BFGoodrich Company

9911 Brecksville Road  
Brecksville, Ohio 44141-3247

## CHANGE ORDER

This number must appear on all invoices, bills of lading,  
packages and correspondence:

Date: 15-May-98

NO: \_\_\_\_\_

Requisition No: \_\_\_\_\_

Applying Against: PB-01-80040

Date: 14-Jan-98

GPO / EA / AR: \_\_\_\_\_

JOB: \_\_\_\_\_

Cause: \_\_\_\_\_

PH: 901-684-5373 FX: 901-684-5398  
Cedar Chemical Corporation  
5100 Poplar Ave., Suite 2414  
Memphis, TN 38137  
Attn: Geoffrey Pratt

PLEASE CHANGE INSTRUCTIONS AS FOLLOWS AND ACKNOWLEDGE BY RETURN MAIL.

## CHANGE ORDER NO.: 1

This change order is to address the goal of producing 10.4 million lbs (vs. the  
original quantity of 8.25 lbs) of Telene material during the 1998 production run.

This Purchase Order (PB-01-80040) will also cover the follow items:

Nitrogen Costs	(BFG pays actual costs + 5%)
Waste Disposal Costs	(BFG pays actual costs)
Pallet Costs	(BFG pays actual costs)

All charges for the above items will abide by the current contract.

All of the costs must be seperated on the invoices and include all detail. Please  
make sure the PO number is on all invoices.

All other terms and conditions will remain the same.

ALL TERMS AND CONDITIONS AS SET FORTH IN OUR ORIGINAL CONTRACT OR PURCHASE ORDER, EXCEPT AS HEREIN  
MODIFIED, SHALL APPLY TO INSTRUCTIONS CONTAINED HEREIN

CORRESPONDENCE PERTAINING TO THESE INSTRUCTIONS SHOULD BE ADDRESSED TO THE:

ATTENTION OF: Dick Hillibrand / Stuart Toner  
Regis Sherry 216/447-5853

CHNG.XLT

AB0000083717/2

BFGoodrich Performance Materials  
9911 Brecksville Road  
Cleveland, Ohio 44141-3247  
216-447-5000

December 22, 1998

Mr. Geoffrey Pratt  
Cedar Chemical Corporation  
Suite 2414  
5100 Poplar Ave.  
Memphis, TN 38137

Dear Geoffrey,

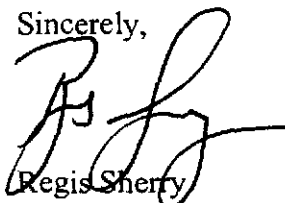
Enclosed is the Purchase Order for the 1999 tolling run. The total volume for the run will be 6.25 million + - 500,000 lbs. Richard Hillebrand will be in charge of the run for BFGoodrich and will coordinate all of the details for 1999 with the West Helena plant. A post mortum has already taken place between Cedar's manufacturing folks and Mr. Hillebrand to start identifying problems from 1998 and how they will be resolved.

As you stated in your Christmas card, BFGoodrich and Cedar shared some real challenges in 1998. Even though we faced these challenges, I feel both groups accomplished a tremendous goal of producing the highest volume to date of around 9.2 million lbs in five months. I know you will agree that some discussions will need to take place between both organizations on certain problems in the 1998 run. Through these discussions both groups will need to agree on resolutions on how to best handle these issues before the 1999 run.

I would also like to discuss Cedar's ability in producing Telene™ material year round. This idea would alleviate some of the difficulties BFGoodrich faces forecasting our volumes.

Two other issues that need resolution from the 1998 campaign are the claim and billing. I will be forwarding under a separate cover a review of these two issues. Please contact me if you have any questions with this information.

Sincerely,



Regis Sherry  
Senior Purchasing Agent

EXHIBIT

I

cc: Dennis Gunson  
Richard Hillebrand  
Richard Kurey  
Norm Matusek  
Jean Pierre Verbeeck

## PURCHASE ORDER

The BFGoodrich Company  
Specialty Chemicals

REQ. NO.

ORDER NO.:

SPOT ORDER

PB-01-80610

PAGE 1 OF 1

RELEASE NO.

ATE: 22-Dec-98

SHIP TO: BFGoodrich Specialty Chemicals  
SP&C DIVISIONat: 9921 Brecksville Rd.  
Brecksville, OH 44141

o: PH: 901-684-5373 FX: 901-684-5398

Cedar Chemical Corporation  
Suite 2414  
5100 Poplar Ave.  
Memphis, TN 38137  
Attn: Geoffrey Pratt

BILL AND SEND INVOICES IN DUPLICATE TO:

ATTN: ACCOUNTS PAYABLE  
BFGoodrich Specialty Chemicals  
SP&C DIVISION  
at: P.O. Box 41256  
Brecksville, OH 44141

SHIPMENT PROMISED

SHIPPING DATE:

TRANSPORTATION

F O B :

CHARGES

TERMS Net 30

ROUTE

(CHEAPEST WAY UNLESS OTHERWISE SPECIFIED)

PLEASE ENTER OUR ORDER PER THE TERMS, CONDITIONS AND SPECIFICATION SET FORTH OR REFERRED TO ON THE FACE AND REVERSE SIDE  
ACCEPTANCE BY RETURN MAIL. TRANSPORTATION CHARGES ON INVOICE MUST BE SUPPORTED BY PAID TRANSPORTATION BILLS  
DO NOT INSURE PARCEL POST SHIPMENTS OR DECLARE EXCESS VALUATION ON EXPRESS FOR OUR ACCOUNT

ITEM NO	QUANTITY	DESCRIPTION	PRICE
1	1	Tolling Run of 6.25 million + - 500,000 pounds of Telene material. The exact product mix will be determined before the run begins.	
		The run will begin May 1, 1999.	
		Rates are as follows:	
		\$0.25 / lb < 60,000 lbs / day	
		\$15,000 / day 60,000 - 75,000 lbs / day	
		\$0.20 / day > 75,000 lbs / day	
		All other details of the Tolling Run are covered in the contract between Cedar Chemical and BFGoodrich.	

OUR CODE NUMBER, PURCHASE ORDER NUMBER AND NET WEIGHT MUST BE STENCILED ON TOP AND SIDES OF DRUMS AND ON ENDS OR SIDES OF BAGS

FREIGHT BILLS, BILLS OF LADING, QUALITY REPORTS, INVOICES AND PACKING SLIPS MUST SHOW OUR CODE NUMBER, PURCHASE ORDER NUMBER, REQUISITION NUMBER AND NET WEIGHT

EACH OF YOUR INVOICES SHALL BEAR THE FOLLOWING STATEMENT "WE HEREBY CERTIFY THAT THESE GOODS AND/OR SERVICES WERE PRODUCED AND/OR PERFORMED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTION 6, 7, AND 12 OF THE FAIR LABOR STANDARDS ACT PF 1938 AS AMENDED, AND OR REGULATIONS AND ORDERS OF THE ADMINISTRATOR OF THE WAGE AND HOUR DIVISION ISSUED UNDER SECTION 14 THEREOF"

SALES OR USE TAX NOT TO BE ADDED UNLESS OTHERWISE INDICATED. DIRECT PAY AUTHORITY BY OHIO PERMIT 98001671.  
KENTUCKY PERMITS 26421 (LOUISVILLE) AND 26422 (CALVERT CITY), TEXAS PERMIT 3-00006-7515-4

DELIVER TO:	BLDG	CHG DEPT: 2549	ACCT	NOTIFY Richard Hillebrand	REQUISITION APPROVED BY: Dennis Gunson
JOB NO		EA NO			

CORRESPONDENCE PERTAINING TO THIS ORDER SHOULD BE ADDRESSED TO THE  
ATTENTION OF Regis Sherry 216-447-5853

The BFGoodrich Company

By:

Title of duly authorized official:

Buyer

# RAW MATERIAL RECEIVING RECORD No 17632

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE N/A	SECTION 1	RECEIVED BY <i>M. Sullivan</i>
------------------------	-----------	-----------------------------------

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
12-4-00	CYMETECH	GLNX 086078	184800

SHIPPER	CARRIER
CYMETECH	AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	RIC	unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

EXHIBIT

J



# RAW MATERIAL RECEIVING RECORD No 17634

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
*N/A*

RECEIVED BY  
*M. Sullivan*

## SECTION 1

DATE <i>12-8-00</i>	ORDER NO. <i>CYMETECH</i>	CAR OR TRUCK NO. <i>NATX230189</i>	Net <i>182900</i>
------------------------	------------------------------	---------------------------------------	-------------------

SHIPPER <i>CYMETECH</i>	CARRIER <i>AKMD/UP</i>
----------------------------	---------------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
<i>1</i>	<i>R/C</i>	<i>unit #1</i>	<i>90500</i>	<i>DCPD</i>

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD № 18051

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1550

RECEIVED BY

*JP*

## SECTION 1

DATE

ORDER NO.

ORDER TRUCK NO.

11/30/00

9901

Net 860

SHIPPER

*BK Hawk*

CARRIER

*BK Hawk*

QUANTITY

2

CONTAINER

*BIT*

DESTINATION

*unit #1*

RAW MAT CODE #

*NA*

DESCRIPTION

*telene Rem*

COMMENTS

*JP*

## SECTION 2

RECEIVED

TIME SAMPLE/CERTIFICATE TAKEN

UNLOADED AT (tank number, unit, warehouse, etc.)

*unit west side of unit 1*

COMMENTS

*2 Drums are present*

## SECTION 3

TECHNICIAN

ACCEPT

REJECT

REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR

ACCEPT

REJECT

REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

**№ 18064**

**CEDAR CHEMICAL 9000-1 REV: C**

TIME IN AT GATE 1210		SECTION 1		RECEIVED BY C. Palmer	
DATE 12-1-00		ORDER NO. Cym0055		CARD OR TRUCK NO. 7031	
SHIPPER Blackhawk		CARRIER Blackhawk			
QUANTITY 156		CONTAINER B/T		RAW MAT CODE # NA	
		DESTINATION W/H		DESCRIPTION Red + Blue dms, pallets	
COMMENTS No Cot A is Needed					
SECTION 2					
RECEIVED BY [Signature]		TIME SAMPLE / CERT. DATE NA			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS Dropped trailer chow 12/1/00					
SECTION 3					
TECHNICIAN NA		ACCEPT [Signature]		REJECT	
COMMENTS					
SECTION 4					
SUPERVISOR [Signature]		ACCEPT [Signature]		REJECT	
PLANT WEIGHT NET NA		UNLOADING TIMES START TIME 1200 END TIME 1215			
COMMENTS					

# RAW MATERIAL RECEIVING RECORD

№ 18056

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1340

RECEIVED BY

C. Robinson

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	Net
12-1-00	Cym0056	1816	18631

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
135	B/T	Unit-1	NA	Rubbers
				EthanoX Bags
				Telene Rims

COMMENTS

No C-Of A is Needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
McBride	✓		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 18061

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1430

RECEIVED BY  
C. Robinson

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
12-4-00	CYMD057	7021	11425

SHIPPER	CARRIER
Blackhawk	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156	B/T	unit-1	NA	55 Gal.
				Blue Top Drm.
				Pallets

COMMENTS  
No C of A is Needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
L. Allen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

N2 18067

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1450

RECEIVED BY

C. L. L. L.

## SECTION 1

DATE

ORDER NO

CAR OR TRUCK NO

DEBIT

12-11-00

04110059

1816

Net 3285

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

CONTAINER

DESTINATION

RAW MAT CODE #

DESCRIPTION

8

B/T

unit-1

NA

55 Gal

NORCAT

Catalyst

COMMENTS

NO COTA is needed

## SECTION 2

RECIPIENT

TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN

ACCEPT

REJECT

REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR

ACCEPT

REJECT

REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

START TIME

END TIME

NET

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 18068

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1700

RECEIVED BY

C. Robinson

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
12-7-00	C4	8541	

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
195	BIT	unit-1	NA	55 Gal.
				Red + Blue
				Dms.

COMMENTS

No COA is Needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
[Signature]	X		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

N2 18369

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1145

RECEIVED BY

JP

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	DECL
12/8/00	11986	9901-7024	Net 11,427

SHIPPER

BK Hawk

CARRIER

BK Hawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
195	B/T	unit #1	NA	MT. Drums

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
L. Allen	

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
L. Allen	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD N<sup>o</sup> 18032

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1315

RECEIVED BY

T. Sain

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK ID	DECLARED WEIGHT
11/22/00	Cym 0048	7021	Net 430

SHIPPER

Cymatech

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	B/T	Unit 4	N/A	Pump B

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD # 18033

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1315

RECEIVED BY

T. S. A. H.

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
11/22/00	Cym 0048	7021	Net 11427

SHIPPER

Cymetech

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
37	BIT	Unit 1	N/A	wooden pallets
156	BIT	Unit 2	N/A	steel empty drums

COMMENTS

SEE BILLS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD N2 18023

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1510

RECEIVED BY

DLW

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. DECLARED WEIGHT

11/17/00

CYM0045

8542

Net 8892

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
104	55 gal drum	unit 1	NA	red top drum
52	55 gal drum	unit 1	NA	blue top drum

COMMENTS

no C of A required

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

KSims

X

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD № 18029

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1530		SECTION 1		RECEIVED BY DLW	
DATE 11/20/00	ORDER NO. CYM0048	CAR OR TRUCK NO. 1815	DECLARED WEIGHT Net 2150, 108		
SHIPPER Black Hawk			CARRIER Black Hawk		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
144	Cans	unit 1	NA	1 gal can	
4	Drums	unit 1	NA	tobacco resin comp B	
1	Drums	unit 1	NA	tobacco resin comp A	
COMMENTS no C of A required					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
KSAS	✓				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					

# RAW MATERIAL RECEIVING RECORD

NO 17631

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

N/A

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
11-14-00	CYMETECH	NATX 230186	Net 182 500

SHIPPER

CYMETECH

CARRIER

AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	unit #1	90500	DCPD
			90050	

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD R2 18910

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1635

RECEIVED BY

TSAIR

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
11/13/00	Cym 0042	1816	Net 42,50

SHIPPER

Cymet crk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
2	BIT	W/H	N/A	Silicon Tetrahydride
1	BIT	W/H	N/A	EPIC

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

11/13/00  
J. J. J. J. J.

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD N2 18017

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1615

RECEIVED BY  
T. Smith

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
11/15/00	Cym0044	7031	Net 114,27

SHIPPER	CARRIER
Cymetech	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	Unit 1	N/A	PAHLS
156	B/T	Unit 2	N/A	Empty
				moist drums

COMMENTS  
SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)  
Dropped trailer at unit

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
J. Jensen	✓		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME
	16:25	

COMMENTS

# RAW MATERIAL RECEIVING RECORD № 18003

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1520

RECEIVED BY

T. SAIC

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
11/10/00	Cym0041	7310	Net 1140

SHIPPER

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
20	B/T	Unit 1	N/A	SS gel Drums Blue Top

COMMENTS

SEE BILLS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

Spotted trailer of unit

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
J. Vincent			

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

11:10:00  
15:30, Spotted

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD NO 17995

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1620

RECEIVED BY

C. Robinson

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. DECLARED WEIGHT

11-9-00

Cymdd40

7021

Net 11,427

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

195

CONTAINER

B/T

DESTINATION

unit-1

RAW MAT CODE #

NA

DESCRIPTION

55 Pail Dms

Pallets

COMMENTS

NO CO of A is needed

## SECTION 2

TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

104- Red Top

39-48x48 Pallets

52- Blue Top

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17629

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE N/A		SECTION 1		RECEIVED BY <i>M. Sullivan</i>	
DATE	ORDER NO.	CAR OR TRUCK NO.	REASON FOR REJECTION		
11-6-00	CYMETECH	UTLX640090	Net 183 000		
SHIPPER CYMETECH			CARRIER AKMD/UP		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
1	R/C	unit #1	90500	DC PD	
			90050		
COMMENTS					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					

# RAW MATERIAL RECEIVING RECORD № 17986

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.2em;">13:40</div>		SECTION 1		RECEIVED BY <div style="font-family: cursive;">M. Sullivan</div>	
DATE	ORDER NO	CAR OR TRUCK NO	DECLARED WEIGHT		
11-6-00	CYMOD35	7031	Net 1290		
SHIPPER <div style="font-family: cursive;">B. Hawk</div>			CARRIER <div style="font-family: cursive;">B. Hawk</div>		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
3	B/T	unit #1	n/a	Comp B	
COMMENTS					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
<div style="font-family: cursive;">M. Sullivan</div>	✓				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME			END TIME	
COMMENTS					

# RAW MATERIAL RECEIVING RECORD № 17985

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.2em;">13:40</div>		SECTION 1		RECEIVED BY <div style="font-family: cursive;">M. Sullivan</div>	
DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT		
11-6-00	C1/MOD36	7031	Net 11427		
SHIPPER <div style="font-family: cursive;">B. Hawk</div>			CARRIER <div style="font-family: cursive;">B. Hawk</div>		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
195	B/T	Unit #1	n/a	Drum	
COMMENTS <div style="font-family: cursive;">156-Red Top 39-48x48 Pallets</div>					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
<div style="font-family: cursive;">M. Sullivan</div>	<div style="font-size: 1.5em;">✓</div>				
PLANT WEIGHT		UNLOADING TIMES			
NET		START TIME			END TIME
COMMENTS					

# RAW MATERIAL RECEIVING RECORD № 17987

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <i>16:00</i>		RECEIVED BY <i>C. Robinson</i>	
SECTION 1			
DATE <i>11/6/00</i>	ORDER NO. <i>Cym0037</i>	CAR OR TRUCK NO. <i>1816</i>	DECLARED WEIGHT Net <i>1290</i>
SHIPPER <i>Blackhawk</i>		CARRIER <i>Blackhawk</i>	
QUANTITY <i>3</i>	CONTAINER <i>B/T</i>	DESTINATION <i>Unit-1</i>	RAW MAT CODE # <i>NA</i>
			DESCRIPTION <i>Telene Rim Polymers</i>
COMMENTS <i>NO C of A is Needed</i>			
SECTION 2			
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB	
UNLOADED AT (tank number, unit, warehouse, etc.)			
COMMENTS <i>17/11</i>			
SECTION 3			
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
COMMENTS			
SECTION 4			
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
<i>[Signature]</i>			
PLANT WEIGHT	UNLOADING TIMES		
NET	START TIME	END TIME	
COMMENTS			

# RAW MATERIAL RECEIVING RECORD № 17628

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <i>N/A</i>		SECTION 1		RECEIVED BY <i>M. Sullivan</i>	
DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED		
<i>1/1-00</i>	<i>CYMETECH</i>	<i>UTLX 661101</i>	Net <i>182 200</i>		
SHIPPER <i>CYMETECH</i>			CARRIER <i>AKMD/UP</i>		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
<i>1</i>	<i>R/C</i>	<i>unit #1</i>	<i>90500</i>	<i>DCPD</i>	
COMMENTS					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME			END TIME	
COMMENTS					

# RAW MATERIAL RECEIVING RECORD

№ 17947

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1130

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	DECLARED
10/24/00	CYN	1762	Net 115,020

SHIPPER

Cynwietek

CARRIER

Matlack

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1 LOAD	T/T	Unit 4	90500	DCPD

COMMENTS

C of A is present

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
McBride	1200

UNLOADED AT (tank number, unit, warehouse, etc.)

Spotted at Unit

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
KD	✓		

COMMENTS

## SECTION 4

SHIP SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
Y. J. J.	✓		

PLANT WEIGHT

NET 44.700

UNLOADING TIMES

START TIME

12:10

END TIME

COMMENTS

Dropped at unit 10-24-00

# RAW MATERIAL RECEIVING RECORD NO 17983

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.2em;">1045</div>		SECTION 1			RECEIVED BY <div style="font-size: 1.2em;">C. Robinson</div>	
DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT			
<div style="font-size: 1.2em;">11/3/00</div>	<div style="font-size: 1.2em;">Cym0033</div>	<div style="font-size: 1.2em;">8541</div>	Net <div style="font-size: 1.2em;">11780</div>			
SHIPPER <div style="font-size: 1.5em;">Blackhawk</div>		CARRIER <div style="font-size: 1.5em;">Blackhawk</div>				
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION		
<div style="font-size: 1.2em;">196</div>	<div style="font-size: 1.2em;">B/T</div>	<div style="font-size: 1.2em;">Unit-1</div>	<div style="font-size: 1.2em;">NA</div>	<div style="font-size: 1.2em;">Pallets, Dums,</div>		
				<div style="font-size: 1.2em;">Flammable</div>		
				<div style="font-size: 1.2em;">Liq.</div>		
COMMENTS <div style="font-size: 1.5em; text-align: center;">NO C &amp; A is needed</div>						
SECTION 2						
RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB					
UNLOADED AT (tank number, unit, warehouse, etc.)						
COMMENTS						
SECTION 3						
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION			
COMMENTS						
SECTION 4						
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION			
<div style="font-size: 1.2em;">M. Sullivan</div>	<div style="font-size: 1.2em;">✓</div>					
PLANT WEIGHT	UNLOADING TIMES					
NET	START TIME		END TIME			
COMMENTS						



# RAW MATERIAL RECEIVING RECORD

Nº 17968

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1040

RECEIVED BY

T. SAIN

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	DECLARED WEIGHT
10-27-00	Cymw0028	7021	Net 11427

SHIPPER	CARRIER
Cymetack	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
104 drums	BIT	Unit 1	N/A	Red Top Drums
52	BIT	Unit 1	N/A	Blue Top Drums
39	BIT	Unit 1	N/A	wood pallets

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
SLAMB	

UNLOADED AT (tank number, unit, warehouse, etc.)

Unit 1

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
	M. Sullivan		

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17970

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1230

RECEIVED BY

T. Stain

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
10-27-00	N/A	94 613	Net 70

SHIPPER

B. F. Goodrich

CARRIER

Roadway

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	T/T	w/H	N/A	Cylinder

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
L. Chel	1240

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NO 17962

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1030

RECEIVED BY

T. S. H. 12

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
10-26-00	Cywood 26	4006	Net 1950

SHIPPER

Cywood 26

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	BIT	W/H	190560	EPAC

COMMENTS

SEE BILLS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
-----------	--------------------------------------

*[Signature]* 11:00

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
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COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
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PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17965

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1605

RECEIVED BY

DW

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. DECLARED WEIGHT

10/26/00 CYM0027 7031 Net 4300

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
4	55 gal drums	unit 1	NA	tolene rim A
6	55 gal drums	unit 1	NA	tolene rim B

COMMENTS

mo C of A required .... rework

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIP SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

KSims

PLANT WEIGHT

UNLOADING TIMES

NET START TIME END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

Nº 17626

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

N/A

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARATION
10-25-00	CYMETECH	NATX230185	Net 184 000
SHIPPER		CARRIER	
CYMETECH		AKMD/UP	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #
1	R/C	unit #1	90500

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

N<sup>o</sup> 17946

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1120

RECEIVED BY

T. S. Aiu

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	NET WT.
10/24/00	Cym 0023	1816	22,360

SHIPPER

Cymetech

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
52	B/T	Unit 1	N/A	Comp A
				1100EOK
				EXP Quarant

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

Material is to be pushed up and removed

# RAW MATERIAL RECEIVING RECORD

Nº 17947

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1130

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
10/21/00	CYN	1712	Net 115,020

SHIPPER

Cyn... ..

CARRIER

Matlark

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1 LOAD	T/T	Unit 4	90500	DC PD

COMMENTS

C of A is present

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
Matlark	1200

UNLOADED AT (tank number, unit, warehouse, etc.)

50001... .. Unit 4

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
KD	✓		

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
Thomson	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

12:11

END TIME

COMMENTS

8 drops at unit 10 24.00

# RAW MATERIAL RECEIVING RECORD No 17948

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1405		SECTION 1		RECEIVED BY T. SAIR	
DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT		
10/24/00	Cym 0025	7024	Net 4300		
SHIPPER Cymetech			CARRIER Blackhawk		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
10	BIT	Unit 4	N/A	Comp A & B Drums	
COMMENTS SEE BILLS					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
M. Sullivan	✓				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					



# RAW MATERIAL RECEIVING RECORD

Nº 17949

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1405

RECEIVED BY

TJAH

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10/24/00	Cym 0025	7024	1080

SHIPPER

Cymetech

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
47	BLT	Unit 1	N/A	Molecular Sieves
				4x5

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
M. Sullivan	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17950

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <b>1405</b>	SECTION 1	RECEIVED BY <b>T. S</b>
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DATE <b>10/24/00</b>	ORDER NO. <b>CYM 0024</b>	CARIOR/TRUCK NO. <b>7024</b>	Net <b>11427</b>
-------------------------	------------------------------	---------------------------------	------------------

SHIPPER <b>Cymateck</b>	CARRIER <b>Blackhawk</b>
----------------------------	-----------------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	unit 1	N/A	Pallets, Steel
156	B/T	unit 2	N/A	Empty
				metal drums

COMMENTS <b>SEE Bills</b>
------------------------------

SECTION 2
RECIPIENT
TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS
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SECTION 3			
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

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COMMENTS
----------

SECTION 4			
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

<b>M. Sullivan</b>	<b>✓</b>		
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PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS
----------

# RAW MATERIAL RECEIVING RECORD

№ 17942

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1605

RECEIVED BY

OW

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. Net

10/23/00

CYMO023

8542

Net 13114

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
miscellaneous items	rubber bags	warehouse	NA	miscellaneous items
	bags, bags			Items

COMMENTS

no C of A required ... see bill

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

*[Signature]*

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

--	--	--	--

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

<i>[Signature]</i>	✓		
--------------------	---	--	--

PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME
-----	------------	----------

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17935

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.5em; font-family: cursive;">1540</div>	SECTION 1	RECEIVED BY <div style="font-size: 1.5em; font-family: cursive;">OW</div>
--	-----------	--

DATE <div style="font-size: 1.2em; font-family: cursive;">10/20/00</div>	ORDER NO. <div style="font-size: 1.2em; font-family: cursive;">CYM0020</div>	CAR OR TRUCK NO. <div style="font-size: 1.2em; font-family: cursive;">7031</div>	Net <div style="font-size: 1.2em; font-family: cursive;">8892</div>
---	---	---	---

SHIPPER <div style="font-size: 1.2em; font-family: cursive;">Black Hawk</div>	CARRIER <div style="font-size: 1.2em; font-family: cursive;">Black Hawk</div>
--	--

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
104	Drum MT 55gal	unit 1	NA	red top drums
52	Drum MT 55gal	unit 1	NA	blue top drums

COMMENTS <div style="font-size: 1.5em; font-family: cursive;">no C of A required</div>
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SECTION 2				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">RECIPIENT</td> <td style="width: 60%;">TIME SAMPLE/CERTIFICATE TAKEN TO LAB</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB		
RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB			

UNLOADED AT, (tank number, unit, warehouse, etc.)

COMMENTS

SECTION 3								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">LAB TECHNICIAN</td> <td style="width: 20%;">ACCEPT</td> <td style="width: 20%;">REJECT</td> <td style="width: 40%;">REASON FOR REJECTION</td> </tr> <tr> <td> </td> <td style="font-size: 1.5em; font-family: cursive;">X</td> <td> </td> <td> </td> </tr> </table>	LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		X		
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION					
	X							

COMMENTS

SECTION 4								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">SHIFT SUPERVISOR</td> <td style="width: 20%;">ACCEPT</td> <td style="width: 20%;">REJECT</td> <td style="width: 40%;">REASON FOR REJECTION</td> </tr> <tr> <td style="font-size: 1.5em; font-family: cursive;">AS/MS</td> <td style="font-size: 1.5em; font-family: cursive;">X</td> <td> </td> <td> </td> </tr> </table>	SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION	AS/MS	X		
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION					
AS/MS	X							

PLANT WEIGHT	UNLOADING TIMES				
NET	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">START TIME</td> <td style="width: 40%;">END TIME</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	START TIME	END TIME		
START TIME	END TIME				

COMMENTS <div style="font-size: 1.5em; font-family: cursive;">DROPPING AT the unit one</div>
---

# RAW MATERIAL RECEIVING RECORD No 17936

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1550

RECEIVED BY

DLW

## SECTION 1

DATE ORDER NO. CAR OF TRUCKING DEPT.

10/20/00 CYM0021 7024 Net 8892

SHIPPER

B. Blackhawk

CARRIER

B. Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
104	MT 55 gal drum	unit 1	NA	blue top drums
52	MT 55 gal drum	unit 1	NA	red top drums

COMMENTS

no C of A required

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

KSims T

PLANT WEIGHT

UNLOADING TIMES

NET START TIME END TIME

COMMENTS

DROPPING 4th the NEW UNIT ONE

# RAW MATERIAL RECEIVING RECORD No 17928

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1145		SECTION 1		RECEIVED BY C. Robinson	
DATE 10/18/00	ORDER NO. Cym0019	CAR OR TRUCK NO. 7031	Net 11427		
SHIPPER Blackhawk			CARRIER Blackhawk		
QUANTITY 195	CONTAINER B/T	DESTINATION unit 1	RAW MAT CODE # NA	DESCRIPTION 55.6 gal Red Top Davis Wooden Pallets	
COMMENTS No C of A is Needed					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
M. Sullivan	✓				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					

# RAW MATERIAL RECEIVING RECORD No 15962

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

N/A

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. GROSS WEIGHT

10-11-00 CymTECH NATX 230199 Net 183 400

SHIPPER

CymTECH

CARRIER

AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	RC	unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET START TIME END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17914

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1630

RECEIVED BY

C. Robinson

## SECTION 1

DATE

ORDER NO.

CAR OR TRUCK NO.

10/12/00

Cym0017

7031

Net

11427

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

CONTAINER

DESTINATION

RAW MAT CODE #

DESCRIPTION

195

B/T.

Unit-1

NA

Pallets

mts. drums.

COMMENTS

NO C of A is Needed

## SECTION 2

RECIPIENT

TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN

ACCEPT

REJECT

REASON FOR REJECTION

NA

NA

COMMENTS

## SECTION 4

SHIFT SUPERVISOR

ACCEPT

REJECT

REASON FOR REJECTION

Mr. [Signature] X

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD No 17906

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1600

RECEIVED BY

C. Robinson

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10-10-00	Cym0013	1815	22585

SHIPPER	CARRIER
Blackhawk	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
185	B/T	W/H	NA	Artificial Synthetic Crude

COMMENTS: NO C of A is needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD

№ 17889

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1630

RECEIVED BY

C. Robinson

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10-9-00	CymD10	7310	430

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	B/T	unit-1	NA	Telene
				Low polymer

COMMENTS

NO C of A is needed

## SECTION 2

RECIPIENT	TIME SAMPLE / CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
B. V. Smith	X		

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD N<sup>o</sup> 17683

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE		RECEIVED BY
-----------------	--	-------------

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10-10-00	BFG	Cylinder 1049	1951 lbs.

SHIPPER	CARRIER
---------	---------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	EPAC Cylinder	Unit 1	NA	EPAC
			90560	

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
Ken Strayhorn	0600c / of A taken to LAB

UNLOADED AT (tank number, unit, warehouse, etc.)  

Unit scales

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
JH	✓		

COMMENTS  
Pre-Accepted

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
J. J. [Signature]	✓		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 15959

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
N/A

RECEIVED BY  
*Mr. Sullivan*

## SECTION 1

DATE: 10-9-00 ORDER NO: CymTECH YEAR OF BSC: GLNX 86078 Net 182800

SHIPPER: CymTECH CARRIER: AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECEIVED TIME SAMPLE CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT UNLOADING TIMES  
NET START TIME END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17858

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1540		SECTION 1		RECEIVED BY DL	
DATE	ORDER NO.	CAR OR TRUCK NO.	Net		
10/2/00	C7M003	1816	104		
SHIPPER Blackhawk			CARRIER Blackhawk		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
100	pint cans	warehouse	NA	MT cans	
72	gal cans	warehouse	NA	MT cans	
COMMENTS mcc of A acquired					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					

# RAW MATERIAL RECEIVING RECORD No 17868

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.2em;">1320</div>	SECTION 1	RECEIVED BY <div style="font-size: 1.2em;">DLW</div>
--	-----------	---

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
9/13/00	CYM0005	7021	11427

SHIPPER <div style="font-size: 1.2em;">Blackhawk</div>	CARRIER <div style="font-size: 1.2em;">Blackhawk</div>
---	---

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
52	drums 55gal	warehouse	NA	red top drums
104	drums 55gal	warehouse	NA	blue top drums

COMMENTS <div style="font-size: 1.2em;">no C of A required</div>
---

SECTION 2	
RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

--	--

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

SECTION 3			
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

--	--	--	--

COMMENTS

SECTION 4			
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

<div style="font-size: 1.2em;">M. Sullivan</div>	<div style="font-size: 1.5em;">✓</div>		
--	--	--	--

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17872

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1535

RECEIVED BY

DL

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK	Net
10/3/00	CYMOOB	7031	312

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
13	bags or cases	warehouse	NT	molecular sieves

COMMENTS

no C of A required

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
Linda Allen	✓		

PLANT WEIGHT

NET N/A

UNLOADING TIMES

START TIME

15:50

END TIME

16:00

COMMENTS

Unloaded @ UNIT I



# RAW MATERIAL RECEIVING RECORD No 17880

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

0820

RECEIVED BY

OW

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10/5/00	M003190	6052	44720
SHIPPER		CARRIER	
Cymtech		Mallack	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #
1	T/T	unit 1	90050
DESCRIPTION			
DCPD			

COMMENTS

Driver had C of A

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO LAB
Henry B. Williams	08:40
UNLOADED AT (tank number, unit, warehouse, etc.)	
unit 1 spotting trailer at DCPD unload station	
COMMENTS	
Driver had C of A	

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
TLP	X	<del>2.0</del> 0.015	C10 IS HIGH

COMMENTS

The high end spec. for C10 is .0055

Per STUART TOWER-APT. 10/5/00

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
McBride	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

10-5-00

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

Nº 17861

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1315

RECEIVED BY

DL

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. DEPT.

10/5/00

NA

313-9139

Net 195

SHIPPER

amtrak

CARRIER

CSE

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	HM/gp	warehouse	NA	silicon
				to tracklink

COMMENTS

mtc of A required

## SECTION 2

RECIPIENT TIME SAMPLE/CERT DATE TAKEN TO LAB

Bennie Foster

13:20

UNLOADED AT (tank number, unit, warehouse etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

--	--	--	--

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

--	--	--	--

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD № 17882

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 15:30	SECTION 1	RECEIVED BY 06/
--------------------------	-----------	--------------------

DATE 10/5/00	ORDER NO. CYM007	CAR OR TRUCK NO. 7310	Net 3440
-----------------	---------------------	--------------------------	-------------

SHIPPER Cymetech	CARRIER Bla. Ramp
---------------------	----------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
8	55 gal drum	warehouse	NA	moist catalyst

COMMENTS  
no C of A required

SECTION 2
RECIPIENT
TIME SAMPLE/CERTIFICATE TAKEN TO LAB

--

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

SECTION 3
-----------

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

SECTION 4
-----------

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
Kestey A. H.	✓		

PLANT WEIGHT	UNLOADING TIMES
NET	START TIME
	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17883

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.5em;">1530</div>		SECTION 1		RECEIVED BY <div style="font-size: 1.5em;">DL</div>	
DATE	ORDER NO.	CAR OR TRUCK NO.	SHIPPER		
10/5/00	CYMO07	7310	Net 22360		
SHIPPER <div style="font-size: 1.5em;">Cymotech</div>			CARRIER <div style="font-size: 1.5em;">Blackhawk</div>		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
53	55 gal drums	warehouse	11A	telomer sim	
				polymer B	
				component	
COMMENTS <div style="font-size: 1.2em;">no C of A required ... note records</div>					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
<div style="font-size: 1.5em;">L. Allen</div>	<div style="font-size: 1.5em;">✓</div>				
PLANT WEIGHT		UNLOADING TIMES			
NET		START TIME		END TIME	
COMMENTS					

# RAW MATERIAL RECEIVING RECORD No 17892

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1320

RECEIVED BY  
C. Robinson

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK	Net
10-6-00	Cym008	7021	11428

SHIPPER	CARRIER
Blackhawk	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
200	BIT	Unit-1	NA	55-Gal Drms
				Wooden pallets
				Tape Cassettes

COMMENTS  
No C of H is Needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
M. Sullivan			

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
M. Sullivan			

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17893

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1550.

RECEIVED BY

C. Robinson

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
10-6-00	Cym009	8542	11429

SHIPPER	CARRIER
Blackhawk	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
195	B/T	unit-1	NA	55.691. Dms
				wooden
				pallets

COMMENTS

No C of A is needed

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
NA	NA		

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
NA	X		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17845

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <b>1600</b>	SECTION 1	RECEIVED BY <b>TS.</b>
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DATE <b>9/29/00</b>	ORDER NO. <b>CYM 001</b>	LAB OR TRUCK NO. <b>7024</b>	Net <b>11427</b>
------------------------	-----------------------------	---------------------------------	---------------------

SHIPPER <b>Cymetech</b>	CARRIER <b>Blackhawk</b>
----------------------------	-----------------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
<b>39</b>	<b>B/T</b>	<b>unit 1</b>	<b>N/A</b>	<b>wooden pallets</b>
<b>156</b>	<b>B/T</b>	<b>unit 1</b>	<b>N/A</b>	<b>Empty steel</b>
				<b>Drum</b>

COMMENTS <b>SEE Bills</b>
------------------------------

SECTION 2	TIME SAMPLE/CERTIFICATE TAKEN
-----------	-------------------------------

RECIPIENT <b>S. Milant</b>	<b>NA</b>
-------------------------------	-----------

UNLOADED AT (tank number, unit, warehouse, etc.) <b>unit 1 - dropped Trailer</b>
---

COMMENTS <b>fact 2/1/01</b>
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SECTION 3	ACCEPT	REJECT	REASON FOR REJECTION
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LAB TECHNICIAN <b>NA</b>	<b>—</b>	<b>—</b>	<b>—</b>
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COMMENTS <b>NA</b>
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SECTION 4	ACCEPT	REJECT	REASON FOR REJECTION
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SHIFT SUPERVISOR <b>S. McKeen</b>	<b>✓</b>		
--------------------------------------	----------	--	--

PLANT WEIGHT <b>NA</b>	UNLOADING TIMES		
NET	START TIME <b>NA</b>	END TIME <b>NA</b>	

COMMENTS <b>NA</b>
-----------------------

# RAW MATERIAL RECEIVING RECORD No 17846

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1640

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
9-29-00	Cym002	7310	430

SHIPPER

Cym002

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
	B/T		N/A	Comp B

COMMENTS

SEE BILLS

## SECTION 2

RECIPIENT TIME SAMPLE CERTIFICATE TAKEN TO LOG

S. M. Smith	NA
-------------	----

UNLOADED AT (tank number, unit, warehouse, etc.)

Trailer dropped unit 1

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

NA	—	—	—
----	---	---	---

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

S. M. Smith	✓		
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PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME
NA	1630	1645

COMMENTS



# RAW MATERIAL RECEIVING RECORD Nº 17847

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1640

RECEIVED BY

T. SAIL

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
9/29/00	Cymoda	7310	9074
SHIPPER		CARRIER	
Cymetech		Blackhawk	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #
5	B/T	Unit 1	N/A
36	B/T	Unit 2	N/A
50	B/T	Unit 1	N/A
DESCRIPTION			
Diene Rubber			
Mt Oxide Catalysts			
Empty pmt cans			

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO LAB
S. M. B.	NA
UNLOADED AT (tank number, unit, warehouse, etc.)	
Trailer dropped at unit 1.	
COMMENTS	

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
NA	Accepted		
COMMENTS			

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
S. M. B.	Accepted		
PLANT WEIGHT	UNLOADING TIMES		
NET	START TIME	END TIME	
NA	1430	1445	
COMMENTS			

# RAW MATERIAL RECEIVING RECORD

No 15957

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

N/A

RECEIVED BY

*M. Sullivan*

## SECTION 1

9-27-00	BFG	UTLX661101	Net 182 400
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SHIPPER

BF Goodrich

CARRIER

AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	unit #1	90500	DCPD

COMMENTS

## SECTION 2

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECT

COMMENTS

## SECTION 4

TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECT

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17835

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1325		RECEIVED BY T.S.	
SECTION 1			
DATE 9/28/00	ORDER NO. N/A	CARRIER 318-6244	Net 150
SHIPPER B.F. Goodrich		CARRIER CSE	
QUANTITY 1 CYL.	CONTAINER BLT	DESTINATION WH	RAW MAT CODE # N/A
			DESCRIPTION Silicone
			90330
			Tetrochloride
COMMENTS SEE Bills			
SECTION 2			
RECIPIENT B. Ennis		TIME SAMPLE CERTIFICATE TAKEN 13:30	
UNLOADED AT (tank number, unit, warehouse, etc.)			
COMMENTS			
SECTION 3			
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
COMMENTS			
SECTION 4			
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
PLANT WEIGHT	UNLOADING TIMES		
NET	START TIME	END TIME	
COMMENTS			

# RAW MATERIAL RECEIVING RECORD No 17837

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <b>1640</b>		SECTION 1		RECEIVED BY <b>DL</b>	
DATE		ORDER NO		DELIVER TO	
<b>9/28/00</b>		<b>APT0052</b>		<b>7021</b>	
SHIPPER		CARRIER		Net	
<b>Blackhawk</b>		<b>Blackhawk</b>		<b>8892</b>	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
<b>104</b>	<b>drum MT</b>	<b>warehouse</b>	<b>NA</b>	<b>red top drums</b>	
<b>52</b>	<b>drum MT</b>	<b>warehouse</b>	<b>NA</b>	<b>blue top drums</b>	
COMMENTS					
<b>no C of A required</b>					
SECTION 2					
RECIPIENT		TIME SAMPLED			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
<b>LS</b>	<b>X</b>				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					
<b>WENT TO THE WAREHOUSE</b>					

# RAW MATERIAL RECEIVING RECORD № 17814

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1640	SECTION 1	RECEIVED BY OW
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DATE 9/25/00	ORDER NO. APT0051	TRUCK NO. 7031	Net 8892
-----------------	----------------------	-------------------	-------------

SHIPPER Blackhawk	CARRIER Blackhawk
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QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156	drum	unit 1	NA	55 gal red top drum MT

COMMENTS no C of A required
--------------------------------

SECTION 2
RECIPIENT
TIME SAMPLE/GENTLE DATE TAKEN TO LAB

--

UNLOADED AT (tank number, unit, warehouse, etc.)
--

--

COMMENTS
----------

SECTION 3
-----------

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS
----------

SECTION 4
-----------

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES
NET	START TIME      END TIME

COMMENTS
----------

# RAW MATERIAL RECEIVING RECORD No 17820

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <div style="font-size: 1.5em; font-family: monospace;">0805</div>	SECTION 1	RECEIVED BY <div style="font-size: 1.5em; font-family: monospace;">T.S.</div>
--	-----------	--

DATE <div style="font-size: 1.5em; font-family: monospace;">9/24/00</div>	ORDER NO. <div style="font-size: 1.5em; font-family: monospace;">N/A</div>	TANK OR TRUCK NO. <div style="font-size: 1.5em; font-family: monospace;">6302</div>	Net <div style="font-size: 1.5em; font-family: monospace;">45.040</div>
--	---	--	---

SHIPPER <div style="font-size: 1.5em; font-family: monospace;">A.P.T.</div>	CARRIER <div style="font-size: 1.5em; font-family: monospace;">Metlock</div>
--	---

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
<div style="font-size: 1.5em; font-family: monospace;">1 Load</div>	<div style="font-size: 1.5em; font-family: monospace;">T/T</div>	<div style="font-size: 1.5em; font-family: monospace;">Unit 4</div>	<div style="font-size: 1.5em; font-family: monospace;">N/A</div>	<div style="font-size: 1.5em; font-family: monospace;">DCPD</div>

COMMENTS  

C of A is present

## SECTION 2

RECIPIENT <div style="font-size: 1.5em; font-family: monospace;">J.L.P.</div>	TIME SAMPLE/CERTIFICATE TAKEN
--	-------------------------------

UNLOADED AT (tank number, unit, warehouse, etc.)  

Spotted by F-1219 Tank DiKe

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
<div style="font-size: 1.5em; font-family: monospace;">PF</div>	<div style="font-size: 1.5em;">✓</div>		

COMMENTS  

CO # Preapproved.

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
<div style="font-size: 1.5em; font-family: monospace;">S. McIntyre</div>	<div style="font-size: 1.5em;">✓</div>		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17806

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1655

RECEIVED BY

DLW

## SECTION 1

DATE	ORDER NO	QUANTITY	Net
9/22/00	APT0050	7021	8892

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
104	55 gal drum	Unit 1	NA	red top drum
52	55 gal drum	Unit 1	NA	blue top drum

COMMENTS

no C of A required

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
K. Smith	X		

PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17791

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1405

RECEIVED BY

T.S.

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. Net

9/20/00

APT 0047

7310

Net 21590

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
31	B/T	Unit A	N/A	Telomerin
21	B/T	Unit 2	N/A	Polymers
				Flammable liquid

COMMENTS

SEE Bills

## SECTION 2

RECIPIENT TIME SAMPLE/CERT DATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD No 17793

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1625		SECTION 1		RECEIVED BY T.S.	
DATE 1-20/00	ORDER NO. APT0048	CAR OR TRUCK NO. 1816	Net 4300		
SHIPPER APT			CARRIER Blackhawk		
QUANTITY 10	CONTAINER B/T	DESTINATION Unit 1	RAW MAT CODE # N/A	DESCRIPTION Telene Rin Polymers	
COMMENTS SEE Bills					
SECTION 2					
RECIPIENT NA		TIME SAMPLE/CERTIFICATE TAKEN TO DATE NA			
UNLOADED AT (tank number, unit, warehouse, etc.) NA					
COMMENTS NA					
SECTION 3					
LAB TECHNICIAN NA	ACCEPT NA	REJECT NA	REASON FOR REJECTION NA		
COMMENTS NA					
SECTION 4					
SHIFT SUPERVISOR S. M. [Signature]	ACCEPT ✓	REJECT	REASON FOR REJECTION		
PLANT WEIGHT NET NA	UNLOADING TIMES				
	START TIME 1610	END TIME 1625			
COMMENTS					

# RAW MATERIAL RECEIVING RECORD Nº 17774

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1435

RECEIVED BY

T. Sain

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. NET WEIGHT

9/18/00

APT0042

7299

Net 15638

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
280	B/T	w/H	N/A	plastic Articles
5	B/T	w/H	N/A	Rubber
150	B/T	w/H	N/A	NOI Chemicals

COMMENTS

See, Bills

## SECTION 2

RECIPIENT TIME SAMPLE / CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD No 17786

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1700

RECEIVED BY  
T. S. A. 12

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
9/19/00	APT 0046	8542	430

SHIPPER	CARRIER
APT	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	BIT	Unit 1	N/A	Comp B
				off spec

COMMENTS  
SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE / CERTIFICATE TAKEN TO
NA	NA

UNLOADED AT (tank number, unit, warehouse, etc.)  
NA

COMMENTS  
NA

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
NA	NA	NA	NA

COMMENTS  
NA

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
S. M. [Signature]	✓		

PLANT WEIGHT	UNLOADING TIMES
NET NA	START TIME 1700 END TIME 1720

COMMENTS  
NA

# RAW MATERIAL RECEIVING RECORD NO 17787

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1700

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	CARTRIDGE/BUCKLE	Net
9/19/00	APT 0046	8542	11427

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	Unit 1	N/A	wooden pellets
156	B/T	Unit 1	N/A	Empty steel
				Drums

COMMENTS

See Bills 104-RED 39-48x48  
52-BLUE

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO
NA	NA

UNLOADED AT (tank number, unit, warehouse, etc.)

NA

COMMENTS

NA

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
NA	NA	NA	NA

COMMENTS

NA

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
S. M. [Signature]	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

NA

START TIME

1700

END TIME

1720

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17764

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1435

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	CARTRIDGE NO.	Net
9/15/00	APT 0040	7024	11481

SHIPPER	CARRIER
API	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	unit A	N/A	Pellets, wooden
228	B/T	unit A	N/A	metal Brms

COMMENTS

See Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
S. Mikulec	N/A

UNLOADED AT (tank number, unit, warehouse, etc.)

N/A

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
N/A	—	—	—

COMMENTS

N/A

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
S. Mikulec	✓		

PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME
N/A	0240	0245

COMMENTS

# RAW MATERIAL RECEIVING RECORD

№ 17759

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

RECEIVED BY

*C. Robinson*

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
9-14-00	APT0039	7031	11427
SHIPPER		CARRIER	
<i>Blackhawk</i>		<i>Blackhawk</i>	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #
195	B/T	W/H	NA
	52-RED	39-48x48 PALLETS	
	104-BLUE		
DESCRIPTION			
misc.			
Items			
<i>see package</i>			

COMMENTS

*NO C of A is needed*

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO LAB
UNLOADED AT (tank number, unit, warehouse, etc.)	

COMMENTS

*1/2 kg sample*

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
<i>NA</i>	<i>NA</i>		

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
<i>map</i>	<i>X</i>		
PLANT WEIGHT	UNLOADING TIMES		
NET	START TIME	END TIME	

COMMENTS

# RAW MATERIAL RECEIVING RECORD **NR 17004**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1345

RECEIVED BY

DLA

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. SEC. NO.

9/6/00

APT0034

1815

Net 3395

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

8

CONTAINER

drum

DESTINATION

warehouse

RAW MAT CODE #

90370

DESCRIPTION

mossat catalyst

COMMENTS

~~more of A required~~ driver did not have C of A <sup>no C of A required</sup>

## SECTION 2

RECEIVED TIME SAMPLE CERTIFICATE NO. DATE

Berni Fargis

13:50

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD № 17730

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1140	SECTION 1	RECEIVED BY DW
-------------------------	-----------	-------------------

DATE 9/8/00	ORDER NO. APT 0036	CAR OR TRUCK NO. 7021	DECLARATION Net 11427
----------------	-----------------------	--------------------------	--------------------------

SHIPPER Blackhawk	CARRIER Blackhawk
----------------------	----------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
52	drum 55 gal	unit 1	NA	red top drums
27	drum 55 gal	unit 1	NA	blue top drums

COMMENTS no C of A required
--------------------------------

SECTION 2
RECIPIENT
TIME SAMPLE/CERTIFICATE TAKEN TO LAB

--

UNLOADED AT (tank number, unit, warehouse, etc.)

--

COMMENTS
----------

SECTION 3
-----------

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS
----------

SECTION 4
-----------

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
RSims	X		

PLANT WEIGHT	UNLOADING TIMES
NET	START TIME
	END TIME

COMMENTS
----------



№ 17732

**CEDAR CHEMICAL 9000-1 REV: C**

TIME IN AT GATE 1555		SECTION 1		RECEIVED BY C. Robinson	
DATE		ORDER NO.		CAR OR TRUCK NO.	
9-8-00		APT0037		7299	
SHIPPER		CARRIER		Net	
Blackhawk		Blackhawk		18654	
QUANTITY		CONTAINER		DESTINATION	
185		B/T		W/H	
				RAW MAT CODE #	
				NA	
				DESCRIPTION	
				misc. items	
COMMENTS					
NO C of A is needed					
SECTION 2					
RECIPIENT		TIME SAMPLE/CERTIFICATE TAKEN TO LAB			
J. Fisher		1615			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
Dropped trailer					
SECTION 3					
LAB TECHNICIAN		ACCEPT		REJECT	
NA		NA			
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR		ACCEPT		REJECT	
J. Fisher		✓			
PLANT WEIGHT		UNLOADING TIMES			
NET NA		START TIME		END TIME	
		1615			
COMMENTS					

# RAW MATERIAL RECEIVING RECORD

№ 17734

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1645

RECEIVED BY

C. Robinson

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. WEIGHT

9-8-00

APT0035

7024

Net 156

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156	BIT	Unit-1	NA	55 Gals.
				Red + Blue
				Dams - MT

COMMENTS

NO C of A is needed

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

S. McIntyre

NA

UNLOADED AT (tank number, unit, warehouse, etc.)

Unit-1

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

NA

ACCEPT

REJECT

REASON FOR REJECTION

COMMENTS

NA

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

S. McIntyre

NA

REJECT

REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

1645

END TIME

1700

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NO 10072

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1335

RECEIVED BY

T. SAIN

## SECTION 1

DATE	ORDER NO.	QUANTITY	Net
9-1-00	APT 0031	7024	11427

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	Unit 1	N/A	Pallets, Steel
156	B/T	Unit 1	N/A	Empty metal
				Drums

COMMENTS

See Bills

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

104-Red 52-Blue 39-48x48 Pallets

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECT

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECT

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

No 15964

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE N/A	RECEIVED BY
------------------------	-------------

## SECTION 1

DATE 8-18-00	ORDER NO. BFB	CAR OR TRUCK NO. NATX 230199	DECLARED WEIGHT Net 175600
-----------------	------------------	---------------------------------	-------------------------------

SHIPPER B.F. Goodrich	CARRIER AKMD / LP
--------------------------	----------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	RIC	Unit 110	90500	DC PD

COMMENTS
----------

## SECTION 2

RECIPIENT Kenneth Harrison	TIME SAMPLE/CERTIFICATE TAKEN TO LAB 3:30
-------------------------------	--

UNLOADED AT (tank number, unit, warehouse, etc.) UNIT 1
--

COMMENTS
----------

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
JH		✓	No COA

COMMENTS
----------

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
McBride	✓		

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS OKed to use by J.m Pirigy 8-18-00
---

# RAW MATERIAL RECEIVING RECORD NR 17866

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE <b>1335</b>		SECTION 1		RECEIVED BY <b>T. SAIT</b>	
DATE		ORDER NO.		CER OF TRUCK NO.	
<b>8-31-00</b>		<b>N/A</b>		<b>90068</b>	
SHIPPER <b>B. F. Goodrich</b>		CARRIER <b>Roadway</b>			
Net <b>50</b>					
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
<b>1</b>	<b>BT</b>	<b>w/H</b>	<b>N/A</b>	<b>Diethylpentadiene</b>	
				<b>Silicon</b>	
				<b>Tetrachloride</b>	
COMMENTS <b>See Bills</b>					
SECTION 2					
RECEIVED		TIME & DATE CERTIFICATE TAKEN TO			
<b>Bernie Ford</b>		<b>13:40</b>			
UNLOADED AT (tank number, unit, warehouse, etc.)					
COMMENTS					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
PLANT WEIGHT	UNLOADING TIMES				
NET <b>50 lbs.</b>	START TIME		END TIME		
COMMENTS <b>5 gals.</b>					

# RAW MATERIAL RECEIVING RECORD <sup>No</sup> 15952

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
N/A

RECEIVED BY  
*M. Sullivan*

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARED WEIGHT
8-31-00	BFG	UTLX 640090	Net 184 200

SHIPPER	CARRIER
BFG	AKMD / UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECIPIENT	TIME SAMPLE / CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NE 17001

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1405

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	CARTRIDGE NO.	Net
8-3-00	APT 0030	7310	1290
SHIPPER		CARRIER	
APT		Blackhawk	
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #
3	B/T	Unit 1	N/A

Comp B Label  
VS. 55gal

COMMENTS

See Bills

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIP SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
Arboide	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **MI 17062**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1405

RECEIVED BY

FS.

## SECTION 1

DATE ORDER NO. CAR OF TRUCK NO.

8-30-00

APT 0030

7310

Net

1

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
5	BIT	URH-1	N/A	Brother Tape
				Cassettes

COMMENTS

SEE BILLS

## SECTION 2

RECIPIENT TIME SAMPLE CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

MBW:dl

✓

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD

NE 87845

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1140

RECEIVED BY  
T.S.

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
8-28-00	APT0026	7031	430

SHIPPER	CARRIER
APT	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1 drum	BIT	Unit A	N/A	Comp B Label

COMMENTS  
SEE Bills, 55gal Drum

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN
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Beanni L...	11:55
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UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

LAB SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **NO 97548**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1435

RECEIVED BY

TS.

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	Net
8-28-00	APT0027	7299	161414

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
5-9.014	BIT	Unit 1	N/A	Rubber
70-3.960	BIT	Unit 1	N/A	Flt Hand X Bags
8-3.440	BIT	Unit 1	N/A	Novel at City elst

COMMENTS

See Bills

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN
Bernie Land	14:00

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1605

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	EXP. OR FULFILL	Net
8-28-00	AP.T0028	7021	11,427

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
39	B/T	Unit 1	N/A	Pallets wood
156	B/T	Unit 1	N/A	Empty metal
				Drums

COMMENTS

See Freight Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

104-RED  
52-BLUE

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

*John Sims*

LAB SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
<i>A. Semy</i>			

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD NR 17818

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

RECEIVED BY

## SECTION 1

*T.S.*

DATE	ORDER NO.	CAR OR TRUCK NO.	DECLARATION
8-22-00	APT 0022	1816	Net 17122

SHIPPER	CARRIER
APT	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
160	B/T	Unit 1	N/A	BFG
Diene Rubber - 9,014 lbs.				material
Hydro Sulfone 50# Cans - 8,000 lbs				

COMMENTS

See Bills One gal Cans - 144 ea

## SECTION 2

RECEIPT	TIME SAMPLED	DATE	TIME

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

BY TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION
<i>[Signature]</i>	<i>[Signature]</i>		

COMMENTS

## SECTION 4

BY SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
<i>[Signature]</i>	<i>[Signature]</i>		

PLANT WEIGHT	UNLOADING TIMES
NET	START TIME 16:30 END TIME

COMMENTS

Dropped trailer at unit

# RAW MATERIAL RECEIVING RECORD

17523

CEDAR CHEMICAL ~ 9000-1 REV: C

TIME IN AT GATE

RECEIVED BY

## SECTION 1

C. Robinson

DATE

ORDER NO.

CAR OR TRUCK NO.

8-23-00

NA

Net 4000

SHIPPER

CARRIER

B F Goodrich

Roadway

QUANTITY

CONTAINER

DESTINATION

RAW MAT CODE #

DESCRIPTION

B/T

W/H

NA

Hazardous  
Material  
DCAD

COMMENTS

No C of A is needed

## SECTION 2

RECIPIENT

TIME SAMPLE CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

INS. TECHNICIAN

ACCEPT

REJECT

REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR

ACCEPT

REJECT

REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NO 17527

CEDAR CHEMICAL • 9000-1 REV: C

TIME IN AT GATE

1410

RECEIVED BY

C. Robinson

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. Net

8-23-00

AP#0023

510

Net

50

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

CONTAINER

DESTINATION

RAW MAT CODE #

DESCRIPTION

100

Pick up

NA

Pt. Cons

COMMENTS

No C & A is needed

## SECTION 2

RECIPIENT TIME SAMPLED TOY TOY TOY TOY

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

McBride

✓

PLANT WEIGHT

UNLOADING TIMES

START TIME

END TIME

1415

NET

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 17532

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1000

RECEIVED BY  
C. L. Linn

## SECTION 1

DATE 8-25-00 ORDER NO. AP40024 CAR OR TRUCK NO. 7021 Net

SHIPPER Blackhawk CARRIER Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156	B/T	W/H	NA	55 Gal.
				Red & Blue
				drms

COMMENTS  
NO C&A is needed

## SECTION 2

RECIPIENT TIME SAMPLE

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT

PLANT WEIGHT UNLOADING TIMES  
START TIME END TIME

NET COMMENTS

# RAW MATERIAL RECEIVING RECORD

NE 17834

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1610

RECEIVED BY

C. Loberson

## SECTION 1

DATE	ORDER NO.	TAB OR TRUCK NO.	Net
8-25-00	AP10025	8541	8892

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156	B/T	W/H	NA	55.6 gal
104	Red			Red + Blue
52	Blue			Drums

COMMENTS

NO C of A is Needed

## SECTION 2

RECIPIENT	TIME SAMPLE	DATE	TIME

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
B. Sims	X		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD <sup>No</sup> 15947

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
N/A

RECEIVED BY  
M. Sullivan

## SECTION 1

DATE	ORDER NO.	CARTRUCK NO.	Net
8-14-00	BFG	UTLX 661101	180500

SHIPPER	CARRIER
B.F. Goodrich	AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	unit #1	90500	DCPD

COMMENTS

## SECTION 2

REMARKS	TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

LAB SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **NR 17481**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE		SECTION 1		RECEIVED BY <i>C. Robinson</i>	
DATE	ORDER NO.	CAR OR TRUCK NO.	DECL.		
8-14-00	APT0016	7310	Net 17516		
SHIPPER <i>Blackhawk</i>			CARRIER <i>Blackhawk</i>		
QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION	
12 Kupper	B/T	W/H	NA	misc.	
90 - Bags				Items	
8 - Telene Rinn					
90 - Chem. NOT					
COMMENTS <i>NO C of A is needed</i>					
SECTION 2					
RECEIPT		TIME SAMPLE / CERTIFICATE			
<i>L. Allen</i>					
UNLOADED AT (tank number, unit, warehouse, etc.) <i>Dropped TRAILER @ MAIN Warehouse</i>					
COMMENTS <i>NA</i>					
SECTION 3					
LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION		
COMMENTS					
SECTION 4					
SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION		
<i>L. Allen</i>	✓				
PLANT WEIGHT	UNLOADING TIMES				
NET	START TIME		END TIME		
COMMENTS					

# RAW MATERIAL RECEIVING RECORD

NO 17452

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1605

RECEIVED BY

C. Robinson

## SECTION 1

DATE

ORDER NO

CAR OR TRUCK NO

8-14-00

AP40017

7021

Net

11427

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY

CONTAINER

DESTINATION

RAW MAT CODE #

DESCRIPTION

195

B/T

Unit-1

NA

Red + Blue

104-RED Drums

52-Blue Drums

drms

39-48X48 PALLETS

COMMENTS

NO C of A is needed

## SECTION 2

RECEIVED AT

TIME SAMPLE CENTER

Trey Steiner

UNLOADED AT (tank number, unit, warehouse, etc.)

Beside Unit 1

COMMENTS

## SECTION 3

LAB TECHNICIAN

ACCEPT

REJECT

REASON

COMMENTS

## SECTION 4

SHIFT SUPERVISOR

ACCEPT

REJECT

REASON

PLANT WEIGHT

UNLOADING TIMES

START TIME

END TIME

NET

COMMENTS

# RAW MATERIAL RECEIVING RECORD

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE 1525	SECTION 1	RECEIVED BY C. Robinson
-------------------------	-----------	----------------------------

DATE 8-15-00	ORDER NO. AP40018	CAR OF TRUCK NO. 8542	Net 11427
-----------------	----------------------	--------------------------	--------------

SHIPPER Blackhawk	CARRIER Blackhawk
----------------------	----------------------

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
195	BIT	W/H	NA	Red +
				Blue Top
				Drms.

COMMENTS No C of A is needed
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SECTION 2
-----------

RECIPIENT [Signature]	TIME SAMPLE/CERTIFICATE TAKEN
UNLOADED AT (tank number, unit, warehouse, etc.) WETA 9/15	52-RED TOP 39-48X48 104-BLUE TOP PALLETS

COMMENTS Dropped trailer
-----------------------------

SECTION 3
-----------

LAB TECHNICIAN	ACCEPT	REJECT	REASON
NA	NA	NA	NA

COMMENTS
----------

SECTION 4
-----------

SHIP SUPERVISOR	ACCEPT	REJECT	REASON
[Signature]	✓		

PLANT WEIGHT	UNLOADING TIMES	
NET NA	START TIME 1530	END TIME 1515

COMMENTS
----------

# RAW MATERIAL RECEIVING RECORD

NR 10904

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1535

RECEIVED BY

T.S.

## SECTION 1

DATE	ORDER NO.	TRUCK NO.	Net
8-18-00	APT0020	7031	11452

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
245	B/T	Unit 1	N/A	55gal
				Steel Drums

COMMENTS

See Freight Bills

## SECTION 2

RECIPIENT	TIME SAMPLED

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

Dropped at unit 1

# RAW MATERIAL RECEIVING RECORD

NR 17006

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1705

RECEIVED BY

TS.

## SECTION 1

DATE	ORDER NO.	DATE OF TRUCK NO.	Net
8-18-00	APT0021	7021	11427

SHIPPER	CARRIER
APT	BLACKhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
156 drums	B/T	Unit 1	N/A	55gal metal drums
39	B/T	Unit 1	N/A	palets, steel plastic

COMMENTS

See Freight Bills

## SECTION 2

RECEIVED	TIME SAMPLE/GUTTING AT YARDS	DATE

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
J. Simon			

PLANT WEIGHT	UNLOADING TIMES
NET	START TIME      END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

No 15948

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

N/A

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. DECLARATION

8-21-00

BFG

UTLX661102

Net 179 900

SHIPPER

B F Goodrich

CARRIER

AKMD / UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	Unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LAB

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

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COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

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PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **N2 17449**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1405

RECEIVED BY

C. Kellum

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
8-11-00	APT0014	7024	14067

SHIPPER

Blackhawk/BFG

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
255	drms, Pallets	unit-1	NA	Miscellaneous
				Items - See
				Bill

COMMENTS

No C of A is needed

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO

UNLOADED AT (tank number, unit, warehouse, etc.)

52 - RED TOP  
104 - BLUE TOP

39 - 48X48 PALLETS  
60 - ETHANOL 20KG BAGS

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
M. Sullivan	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD NR 17439

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1705

RECEIVED BY

JP

## SECTION 1

DATE	ORDER NO.	SHIP TO YOU	NET WT
8/9/00	NA	7024	Net 11,427

SHIPPER

Blackhawk BFG

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
195	BIT	unit 1	NA	DRUMS
52- RED TOP		104- BLUE TOP		

COMMENTS

39- 48x48 PALLETS

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN TO LAB
J. Lang	1720

UNLOADED AT (tank number, unit, warehouse, etc.)

11-1

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
L. A. W.	✓		

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **NR 17425**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1245

RECEIVED BY

*Dh*

## SECTION 1

DATE ORDER NO. CARTRIDGE NO.

8/7/00

138-24325

313427

Net 800

SHIPPER

BFG

CARRIER

CSE

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
32	brums	warehouse	AA	DCPD
			90050	

COMMENTS

no C of A required

## SECTION 2

RECIPIENT TIME SAMPLED BY

*Bennie Long*

UNLOADED AT (tank number, unit, Warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

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COMMENTS

## SECTION 4

SHED SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

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PLANT WEIGHT

UNLOADING TIMES

NET	START TIME	END TIME
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COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 19402

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1300

RECEIVED BY  
T. SAH

## SECTION 1

DATE	ORDER NO.	CAN OF TRUCK NO.	Net
8-3-00	APT 006	1815	21,814

SHIPPER	CARRIER
APT	Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
5188	BIT	w/H	N/A	Nisalluseous
				B.F. Goodrich
				material

COMMENTS  
SEE Bills

## SECTION 2

RECIPIENT	TIME SAMPLE/CERTIFICATE PREPARED
<i>[Signature]</i>	13:30

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 13404

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE  
1605

RECEIVED BY

DL

## SECTION 1

DATE 8/3/00 ORDER NO. APT0008 UNIT 7021 Net ~~11822~~ 9804

SHIPPER

Blackhawk

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
112	drums 55gal	unit 1	NA	blue top drums
60	drums 55gal	unit 1	NA	red top drums

COMMENTS

no C of A required

## SECTION 2

RECIPIENT TIME SAMPLED BY DATE

NA

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT

NA

COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT

PLANT WEIGHT

NET NA

UNLOADING TIMES

START TIME

1600

END TIME

1615

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 17342

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1500

RECEIVED BY

T. Saiv

## SECTION 1

DATE	ORDER NO.	CARTRIDGE NO.	Net
8-2-00	N/A	4	N/A

SHIPPER

B.F. Goddick

CARRIER

Cannighan

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1 LOAD	T	Kerosene	<del>N/A</del> 90060	Kerosene

COMMENTS

See Bills

## SECTION 2

RECEIPT	TIME SAMPLE/CERTIFICATE TAKEN

UNLOADED AT (tank number, unit, warehouse, etc.)

Unit 1 into Scrubber tank T1214

COMMENTS

## SECTION 3

QUALITY INSPECTOR	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION
J. J. J.			

PLANT WEIGHT

2660

UNLOADING TIMES

NET	START TIME	END TIME
1000	15:20	16:00

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 17308

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1205

RECEIVED BY

T. SAIL

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
8-1-00	N/A	94276	5/2

SHIPPER

B.F. Goodrich

CARRIER

Roadway

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1 LOAD	B/T	W/H	N/A	Cylinders
10PCS.				NOI

COMMENTS

SEE Freight Bills

## SECTION 2

RECIPIENT	TIME SAMPLED	TYPE	DATE
Roadway	12:00		

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD **N2 17307**

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1310

RECEIVED BY

T.S

## SECTION 1

DATE	ORDER NO	CAR OR TRUCK NO	Net
8-1-00	APT 0004	8542	860

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	B/T	W/H	N/A	Comp A
1				Comp B
				Labels

COMMENTS

See Freight Bills

## SECTION 2

RECEIVED AT	TIME SAMPLE/CERT
<i>[Signature]</i>	17:30

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECT

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECT

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 17308

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1315

RECEIVED BY

T. SAIA

## SECTION 1

DATE	ORDER NO.	BAR OR TRUCK NO.	Net
8-1-00	APT0003	8542	15,600

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	B/T	W/H	N/A	214 Directly 3-Portland

COMMENTS

SEE Freight Bills

## SECTION 2

RECIPIENT	TIME SAMPLE CERTIFICATE TAKEN
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UNLOADED AT (tank number, unit, warehouse, etc.)

APT 1315

APT

Blackhawk

COMMENTS

8-1-00 34

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR
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COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR
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		SEE Freight Bills	
--	--	-------------------	--

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS



# RAW MATERIAL RECEIVING RECORD

NR 17389

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1315

RECEIVED BY

T.S

## SECTION 1

DATE	ORDER NO.	CAR OR TRUCK NO.	Net
8-1-00	APT0003	8542	15.600

SHIPPER

APT

CARRIER

Blackhawk

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
34	B/T	w/H	N/A	Silicon Tetrachloride

COMMENTS

SEE Freight Bills

## SECTION 2

RECEIVED	TIME
<i>[Signature]</i>	13:30

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

No 15841

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

0900

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE	ORDER NO.	PLAT OR TRUCK NO.	WEIGHT
7-26-00	BFG	GLNX 24147	Net 177 400

SHIPPER	CARRIER
BF Goodrich	AKMD / UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	R/C	Unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECEIVED	TIME SAMPLE CERTIFICATE

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LKD TECHNICIAN	ACCEPT	REJECT	REASON FOR REJECTION

COMMENTS

## SECTION 4

SHIFT SUPERVISOR	ACCEPT	REJECT	REASON FOR REJECTION

PLANT WEIGHT	UNLOADING TIMES	
NET	START TIME	END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

No 15942

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

0900

RECEIVED BY

*M. Sullivan*

## SECTION 1

DATE ORDER NO. CAR OR TRUCK NO. NET WEIGHT

7-26-00

BFG

NATX 230186

Net 174600

SHIPPER

BF Goodrich

CARRIER

AKMD/UP

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	RIC	unit #1	90500	DCPD

COMMENTS

## SECTION 2

RECIPIENT TIME SAMPLE/CERTIFICATE TAKEN TO LOAD

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

## SECTION 3

LAB TECHNICIAN ACCEPT REJECT REASON FOR REJECTION

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COMMENTS

## SECTION 4

SHIFT SUPERVISOR ACCEPT REJECT REASON FOR REJECTION

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PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

END TIME

COMMENTS

# RAW MATERIAL RECEIVING RECORD

NR 17365

CEDAR CHEMICAL 9000-1 REV: C

TIME IN AT GATE

1545

RECEIVED BY

DL

## SECTION 1

DATE	ORDER NO.	LOT OR TRUCK NO.	Net
7/28/00	NA	15682	75

SHIPPER

BFG

CARRIER

Roadway

QUANTITY	CONTAINER	DESTINATION	RAW MAT CODE #	DESCRIPTION
1	box	warehouse	NA	DCPD

COMMENTS

no C/A required

## SECTION 2

RECEIVED	TIME SAMPLED	CERTIFICATE NO.	ANALYST
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*[Signature]*

UNLOADED AT (tank number, unit, warehouse, etc.)

COMMENTS

Aug 8. & fin 7. aware it is in the warehouse

## SECTION 3

LAB TECHNICIAN	ACCEPT	REJECT	REASON
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NA

COMMENTS

## SECTION 4

SUPV. SUPERVISOR	ACCEPT	REJECT	REASON
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*[Signature]*

✓

PLANT WEIGHT

UNLOADING TIMES

NET

START TIME

1600

END TIME

1610

COMMENTS

TELENE RIM  
STANDARD OPERATING PROCEDURES  
JULY 2, 1991

EXHIBIT

K

SH0000000042/1

Revised 6/27/91

TELENE RIM  
STANDARD OPERATING PROCEDURES

- I. SAFETY
- II. RAW MATERIALS
- III. PROCESS SUMMARY
- IV. WATER BATCHING
- V. CLEANOUT AND DEAC CONDITIONING
- VI. NITROGEN PURGE
- VII. TRIMER PREPARATION
- VIII. FEED BLEND PREPARATION WITH TRIMER
- IX. DELETED
- X. FAST "A" PREPARATION
- XI. SLOW "A" PREPARATION
- XII. "B" PREPARATION
- XIII. DRUMMING OF PRODUCTS
- XIV. SCRUBBER OPERATION
- XV. POST OPERATION CLEANUP
- XVI. WASTE HANDLING

Saved on \George\Rim

SAFETY

TELENE RIM SOP

I. SAFETY

- A. Working in the department requires that safety glasses, hard hats, and safety shoes be worn for personnel protection as a minimum. Certain phases of a job may require additional protection to be properly used. Sampling requires the additional use of rubber gloves and goggles as a minimum. Specific safety equipment and procedures will be included in the SOP when they differ from routine. When in doubt, consult the SOP, the MSDS, The Hazard Evaluation Forms, and your lead operator, or supervision.
- B. The procedures given in this SOP must be followed exactly. Deviations increase the chance that someone may be injured. If a procedure is not understood or seems to be wrong, stop and get help immediately. Production, quality, equipment damage, and costs may also be adversely affected, but they are all secondary to human suffering.
- C. Know and follow all standard plant procedures at all times. Failure to properly clear a piece of equipment could result in injury to another worker. Again, if in doubt, consult a member of supervision.



RAW MATERIALS

TELENE RIM SOP

II. RAW MATERIALS

- A. The production of Telene Rim requires the following raw materials.
1. Dicyclopentadiene (DCPD)
  2. Ethyl Aluminum Propoxychloride (EAPC)
  3. Diene 55 NFA/AC (Rubber), or Diene 55AC6 (Rubber)
  4. Tri (2,4-di-t-butylphenyl) phosphite (MARK 2112)
  5. Ethanox 330
  6. 1-Propanol or N Propanol
  7. 2,4-Dimethyl-3-pentanol (DMP OH)
  8. Diethylaluminum Chloride (DEAC)
  9. Tetrachlorosilane ( $\text{SiCl}_4$ )
  10. Molybdate Catalyst
  11. Kerosene
  12. Toluene
  13. Carbon black in "B" formulation (Component)
- B. DCPD will be received in a heated tanktruck. It is a light yellow liquid when at temperatures above 92 deg. F. It is very flammable and has a low flash point of 107 deg.F. It is toxic if ingested and may cause lung, kidney, and liver damage. The maximum TWA exposure should be less than 5 ppm. Small fires may be fought with foam or dry chemical. The odor of DCPD is very pervasive, a very little goes a long way. It must be scrubbed from any vent streams with kerosene.
- C. EAPC will be received in 26 gal. (200 lb.) cylinders. It is extremely flammable and pyrophoric, reacts violently with water, causes thermal burns to skin and eyes, and produces hazardous thermal decomposition products. A full aluminized proximity suit is needed when transferring EAPC, with a back-up fire watch person having a dry chemical fire extinguisher in hand. First aid begins with flushing with large amounts of cool

water. Metal fume fever can result from breathing fumes during decomposition or fire.

- D. Diene 55 is polymerized polybutadiene. It is a very light colored translucent rubber. It will burn. It is non-toxic and is non-hazardous.
- E. MARK 2112 is a white free flowing powder. Dust explosions are possible with this material. Fires may be extinguished using water, dry chemical, CO<sub>2</sub>, or foam.
- F. Ethanox 330 is also a white powder. It is perhaps more prone to dust explosions than MARK 2112. Fires may be fought with water spray, dry chemical, CO<sub>2</sub>, or foam.
- G. N-Propanol is a colorless light liquid alcohol. It has a flash point of 74 deg.F and is a dangerous fire hazard. It is toxic, an irritant, and a narcotic. Fires may be fought with water spray, CO<sub>2</sub>, foam, or dry chemical.
- H. DMP OH is an alcohol. It is a flammable liquid with a flash point of 96 deg.F. Most alcohols are toxic, irritating, and narcotic. Fires may be fought with water spray, CO<sub>2</sub>, foam, or dry chemical.
- I. DEAC is a colorless liquid. It is pyrophoric, extremely flammable, reacts violently with water, causes thermal burns on contact, and produces hazardous thermal decomposition products. A full aluminized proximity suit is needed when transferring large quantities with a backup firewatch person having a dry chemical fire extinguisher in hand. First aid begins with flushing with large amounts of cool water. Metal fume fever may be caused by inhalation of the fumes.
- J. SiCl<sub>4</sub> is a clear heavy liquid composed of chlorinated silicon. It is very volatile, reacts violently with water and alcohols, and its exposure to moist air will produce dense fumes of silica particles and hydrogen chloride. Inhalation of SiCl<sub>4</sub> or its fumes can cause serious damage. It is nonflammable, but if it is involved in a fire large amounts of water should be used to rapidly flush the material.
- K. Molybdate catalyst is a dark blue-green wax-like solid having a soapy odor. It is not expected to readily burn and is not a known health hazard.

- L. Kerosene is a colorless light flammable liquid. Upon contact, it causes defatting of the skin which may lead to irritation. Fire may be fought with dry chemical or foam.
- M. Toluene is a colorless flammable liquid. Inhalation of fumes can cause a narcotic affect. Any form of contact may lead to liver and kidney damage. Fire may be fought with dry chemical or foam.
- N. Eighteen percent carbon black in "B" component has the same hazard properties as "B" component.

PROCESS SUMMARY

TELENE RIM SOP

III. Process Summary

- A. Telene Rim is a Reaction Injection Molding Plastic. It is structurally strong enough to replace steel and is intended to do so for some uses. It is capable of being painted or plated to protect it and give a pleasing appearance. Some of its uses will take advantage of its very good corrosion resistance and could replace such items as FRP or combinations of steel structures with corrosion resistant coatings.
- B. Productivity and quality of Reaction Injection Molding Plastic requires very careful attention of formulation of the two major ingredients. Apparently small deviations in formulation quantities, order of addition, and other control factors can result in major differences in the injection molding results. Air and water must be scrupulously avoided during most of the formulation and packaging steps. Many of the ingredients will react violently with water.
- C. After careful equipment cleaning and drying, all equipment must be completely nitrogen blanketed. Production begins by preparation of the feed blend which is common to both parts of the final product. DCPD is charged into the reactor and heat soaked to form approximately 15% trimer (CPDT) in the solution, which may then be diluted to a lower trimer concentration by the addition of more DCPD. Chopped Diene 55 is then added to the solution. The mixture is stirred to dissolve the rubber and then, if necessary, vacuum distilled to remove water. On the next scheduled run a drier form of rubber (Diene 55 AC6) will be used and the drying stop may not be necessary. This feed blend is then ready to be transferred through a filter to be used to make either the "A" part or "B" part formulation.
- D. The B formulation is prepared by transferring a carefully weighed quantity of feed blend to the B reactor. To this feed blend, the anti-oxidants, Mark 2112 and Ethanox 330 are carefully weighed in and mixed. Next, a solution of Molybdate catalyst is added and mixed. Finally, the formulation is degassed under vacuum and is then ready for filtration and charging to dry nitrogen blanketed drums or other containers. On the next scheduled run, 3 drums of 18% carbon black in "B" solution will be added to two of the "B" formulation batches.

- E. The A formulations are also prepared by transferring a carefully weighed quantity of feed blend to the A reactor. With the A formulations, not only should the additive quantities be very precise, but the order of addition must be correct. Incorrect order of addition will cause crosslinking of the rubber. First DEAC, or EAPC, is added and mixed. This is followed by slow addition of the DMPOH solution over a five minute period. Next, N-Propanol is added in a similiar manner. After addition of the N-Propanol, the reactor is heated under vacuum and is degassed using a sparge of nitrogen gas. Degassing may not be necessary when EAPC is used. The final addition is SiCl<sub>4</sub> followed by mixing for fifteen minutes. Now the mix is degassed with vacuum only and is ready for filtering and charging to dry N<sub>2</sub> blanketed drums.

Note: If EAPC is used N-propanol is not added. EAPC is a reaction product of DEAC and N-propanol.

- F. Following are the changes that will be made in the next scheduled run compared with previous runs.

1. ENB will not be used. All batches of feed blend will be made using a mixture of DCPD and trimer (DCPD/CPDT).
2. Ethyl Aluminum Propoxychloride (EAPC) will be tested as a substitute for DEAC in the preparation of "A" formulation. It is hoped this will eliminate the degassing step to remove ethane. EAPC is a mixture of DEAC an N-propanol.
3. 18% carbon black in "B" formulation will be added to two of the "B" formulation batches to make a black batch.
4. Two batches of DCPD/CPDT will be prepared in R-PE101 and transferred into R-PE102 to make one batch of feed blend.
5. Molybdate will be added from a drum rather than from a cylinder.
6. A drier form of rubber (Diene 55AC6) will be used, which may eliminate the feed blend drying step.

WATER BATCHING



TELENE RIM SOP

IV. WATERBATCHING

- A. The purposes of waterbatching are to provide training, check equipment and piping for leaks, check controls and instrument responses, and to assure that the equipment and piping are clean. Note: Check the DCPD meter carefully.
- B. Detailed waterbatching instructions will be issued in the form of a checklist. The checklist provides an instruction or step followed by space for comments and verification of when the step has been completed and by whom. The checklist must be completely filled with dates, times, appropriate comments, and initials. For example, while testing a line for leaks, a leak is found at 0930 hrs. on 7/15/90 by STL. Below that a comment should show that the leak was repaired by JLK at 12:50 hrs. 7/15/90 and retested and found to be leak-free at 13:25 hrs. 7/15/90 by FRT.

CLEANOUT & DEAC  
CONDITIONING

TELENE RIM SOP

V. CLEANOUT AND DEAC CONDITIONING

A. Since this process is extremely sensitive to moisture, a special toluene cleanout procedure is necessary to insure that ALL of the equipment and piping is as dry as possible and free of toluene soluble contaminants. As with the waterbatching, a check list will be utilized to assure that no small detail is missed, such as draining and blowing a 3/4 inch bottom mounted blowout in a pipe.

1. To thoroughly clear the process of all air, follow the TELENE RIM SOP section VI.
2. Verify that the scrubber system is in operation and pull a full vacuum on R-PE101 and R-PE105 and block it in.

Note: After the toluene boilout in each reactor (R-PE101, R-PE102, R-PE103, R-PE104, and R-PE105), sample the toluene before discharging it from the reactor, and have the lab determine the water content by Karl Fischer method. Be sure the sample container is dry and sealed immediately to prevent a pick up of moisture. If the water content is higher than indicated below, repeat the drying process. Add additional dry toluene if necessary. Since R-PE101 and R-PE102 will be blocked in during the boil, they cannot be dried as well as the other three reactors. Have them as free of water as possible.

R-PE103 \*                      100 ppm max.

R-PE104 \*                      100 ppm max.

R-PE105                        100 ppm max.

R-PE101                        As low as possible, record results

- \* 100 ppm max, is strongly preferred, but 200 ppm will be accepted if necessary to avoid a long delay.

3. Set eight drums of toluene at the DCPD unloading station. Connect the drum unloading dip-pipe and valve to the end of the tanktruck unloading line. Connect a hose which has been blown clean with nitrogen to the nitrogen pressurization line. CAREFULLY OPEN THE NITROGEN VALVES TO ESTABLISH A LOW PRESSURE PURGE. Insert the dip-pipe into a drum and the nitrogen purge into the other bung. Open valves in the DCPD charge line and charge a drum of toluene into R-PE105. Using the same procedure charge the remaining seven drums into R-PE101. When all of the toluene has been charged, close the valve at the dip-pipe. Connect a hose which has been blown clean with nitrogen to the end of the charge line and blow the line clear to both R-PE101 and R-PE105 with nitrogen. When the line clears, close the charge valves on the reactors, pressurize the line slightly with nitrogen and momentarily open the line blowout valves carefully into waste collection buckets. Close all valves. Put the bung plugs back in the drums and properly store them.
  4. Break vacuum on R-PE101 with nitrogen and turn on the agitator. Open the drain valve to the steam trap. Open the steam supply valve and heat the toluene to 160 deg.F. Since R-PE101 has no condenser and receiver, the toluene cleaning will have to be accomplished by refluxing within the reactor. The reactor will remain blocked in during this step. Maintain the 160 deg.F temperature in R-PE101 for four hours.
- Note: Be sure the valves to the sight glass on R-PE101 are open during the toluene boil and the sight glass is well drained at the end. Close the drain valve after draining, so moisture doesn't enter.
5. Pressurize R-PE101 to 20 psig with nitrogen. Transfer all of the toluene from R-PE101 into R-PE102. During the transfer, drain some toluene from all sample and drain valves into waste buckets.
  6. When R-PE101 is empty, vent it to the scrubber and gently apply steam to the coils to dry out the toluene. Pressurize the reactor to 3-5 psig with nitrogen and cool it. When cool, inspect it to verify that it is clean.
  7. Break vacuum on R-PE102 with nitrogen and turn on the agitator. Verify that the reactor jacket is empty. Open the steam condensate valve. Open the

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steam supply valve and heat the toluene to 160 deg.F. Since R-PE102 has no condenser and receiver, the toluene cleaning will have to be accomplished by refluxing within the reactor. The reactor will remain blocked in during this step. Maintain the 160 deg.F temperature for four hours.

Open R-PE105 valve to E-PE305A and verify that all other valves are closed. Verify that tempered water is shut off to E-PE305A and cooling water is flowing through E-PE305B.

Transfer all of the toluene from R-PE102 into R-PE105. During the transfer, drain some toluene from all sample and drain lines into waste buckets.

8. Pressurize R-PE102 to 20 psig with nitrogen.
9. When R-PE102 is empty, vent it to the scrubber and gently apply steam to the jacket to dry out the toluene. Pressurize the reactor to 3-5 psig with nitrogen and cool it. When cool, inspect it to verify that it is clean.
10. Break vacuum on R-PE105 with nitrogen. Verify that water is flowing through the condenser, E-PE305B. Open the valve in the line from R-PE105 to the condenser (E-PE305A), and the valve from the receiver (V-PE305) to the scrubber. Verify that the reactor jacket is empty. Record the weight of toluene in the reactor. Open the jacket drain valve to the steam trap. Open the steam supply valve to the jacket and heat the toluene to boiling. Distill over approximately 50 gallons of toluene to the receiver. Stop the agitator. Record the weight in R-PE105.
11. Close the valve in the line between R-PE105 and its receiver. Pressurize the reactor to 20 psig with nitrogen. Open the vent valve on R-PE104 and verify that all other valves on the reactor are closed. Verify that its jacket is empty and zero the weigh scale for R-PE104. Verify that there is no pressure on the Feed blend transfer line and filter. Open the filter housing and install 55 micron filter bag in the filter. Carefully close the filter and tighten. Verify that the three-way valve in the transfer line is lined up to transfer to R-PE104. Verify that all drain or blowout valves in the line are closed. Open the feed blend charge valve on R-PE104 and the remaining valves in the line. Open the bottom valve on R-PE105 and transfer about 50 gallons of toluene to R-PE104. Record the weights

in the reactors.

12. Open the vent valve on R-PE103 and verify that all other valves on the reactor are closed. Verify that the reactor jacket is empty and zero its weigh scale. Switch the three-way valve so that the flow will be to R-PE103. Open the feed blend charge valve on R-PE103 and transfer the remaining approximately 300 gallons of toluene to R-PE103. Allow the line to blow clear with nitrogen from R-PE105. Close the charge valve after the line blows clear. Record the weights in both reactors.
13. While the feed blend line is pressurized, carefully crack open the drain or blowout valve in the line immediately above the charge valve on R-PE103. Catch any liquid in a waste bucket. Switch the three-way valve so that the flow is back to R-PE104. Open the feed blend charge valve on R-PE104 and allow the pressure in R-PE105 to blow the line clear into R-PE104. When the line blows clear, close the charge valve. Carefully crack open the drain valve in the feed blend charge line immediately above the charge valve on R-PE104. Repeat this blowing down at the other valves at the filter and the sample point. Close the bottom valve on R-PE105. Record the weights in both reactors.
14. While there is still some remaining pressure in R-PE105, verify that the vent valve on the receiver is closed, and open the valve between the reactor and receiver. Empty the receiver into a toluene drum. Label it with the date, "toluene, feedblend boilout," and save it for future clean up. Be certain to blow out all low points in the piping including the sight glass, sample connections and drains. While the reactor is still hot, turn on the vacuum pump and open the vacuum valve on the receiver and pull a full vacuum on the reactor and receiver. Shut off the vacuum valve and break vacuum with nitrogen. Open the vent valve on the receiver and partially open the steam valve to the reactor jacket to dry the reactor for at least 30 minutes with a slow stream of nitrogen going to the reactor. Cool the reactor, shut off the vent valve on the receiver, and pressure the reactor and receiver to 3 to 5 psig. Close the valve between the reactor and receiver. Visibly inspect the interior of the reactor to verify that it is clean and dry.

15. Turn on R-PE103 agitator. Open the valve from the reactor to its receiver. Verify that water is flowing through the condenser, EPE303A. Turn on the vacuum pump and barely crack open the vacuum valve on the receiver. Open the steam condensate valve on the reactor jacket to the trap. Open the steam supply valve to the jacket of R-PE103 and gently boil over about 50 gallons of toluene to the receiver. Shut off the steam to the jacket and the vacuum valve on the receiver. Shut off the agitator. Break vacuum using nitrogen. Record the weight in the reactor.
16. Inspect the filter in the drumout line for cleanliness, install a 55 micron bag, and close the filter tightly. Open the bottom valve on the reactor and drum out about 10 gallons of toluene. Be certain to purge about one gallon through the sample connection. Connect a clean nitrogen blown all-chem hose from the bottom of R-PE103 to the bottom of R-PE104 and transfer the remaining toluene to R-PE104. Blow the hose clear from R-PE103 to R-PE104 and close the bottom valves on both reactors. Vent pressure off of the hose through the drumout line at R-PE103.
17. Repeat paragraph 14 for R-PE103 and its receiver. Label the drum of toluene as "B" "reactor boilout, date, and toluene."
18. Turn on R-PE104 agitator. Open the valve from the reactor to its receiver. Verify that water is flowing through the condenser, EPE304A. Turn on the vacuum pump and barely crack open the vacuum valve on the receiver. Open the steam condensate valve on the reactor jacket to the trap. Open the steam supply valve to the jacket of R-PE104 and gently boil over about 50 gallons of toluene to the receiver. Shut off the steam to the jacket.
19. Add 11 pounds of DEAC to R-PE104. Agitate at 230 deg.F for 30 minutes. Allow reflux to occur in the reactor. Close the vacuum valve from the receiver to the vacuum pump. Shut off the agitator. Pressure the reactor and receiver to 20 psig with nitrogen. *Sample R-4 For % H<sub>2</sub>O 0 - ppm 100*
20. Inspect the filter in the drumout line for cleanliness, install a 55 micron bag, and close the filter tightly. Open the bottom valve on the reactor and drum out the reactor until it is empty.

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Be certain to purge about one gallon through the sample connection. Label the drums:

"Toluene/DEAC"

"A Reactor Conditioning"

Date

21. While there is still some remaining pressure in R-PE104, verify that the vacuum valve on the receiver is closed, and open the valve between the reactor and receiver. Empty the receiver into a toluene drum. Label it with the date, "toluene, and "A" reactor cleanout." Be certain to blow out all low points in the piping including the sight glass, sample connections and drains. Cool the reactor and pressure the reactor and receiver to 3 to 5 psig. Close the valve between the reactor and receiver. Visibly inspect the interior of the reactor to verify that it is clean and dry.



NITROGEN PURGE

TELENE RIM SOP

VI. Nitrogen Purge

- A. The entire Telene Rim system must be purged clear of oxygen before charging kerosene into the scrubber tank, connect a hose which has been blown clean with nitrogen to the end of the DCPD unloading line. Open the vent valve on R-PE101 and the valves in the DCPD charge line. Using a hose that has been blown clean with nitrogen, blow nitrogen through the line for two minutes. Purge the DCPD line to R-PE105 using the same technique. Close the valves in the charge lines after purging them, close the vent valve on R-PE101 and pressure it to 25 psig with nitrogen.
- B. Check the oil level in the vacuum pump (V-PE107) oil reservoir and add oil as needed. Verify that cooling water is flowing to the jacket of the pump. Check the exhaust knockout pot (V-PE401A) to verify that it is empty, its bottom drain valve is closed, and the level gage glass valves are open. Turn on the vacuum pump.
- C. Vent R-PE101 to the scrubber until it is down to 1-2 psig then close the vent valve. Open the vacuum valve to R-PE101 and pull a full vacuum on the reactor. Close the vacuum valve and again pressure R-PE101 to 25 psig with nitrogen. Repeat the purging procedure until the reactor has been pressurized and evacuated three times. On the third pressurization blow nitrogen through the transfer line from R-PE101 to R-PE102 for at least two minutes to purge the transfer line. Close valves in the line to keep it free of air. Also purge all sample and drain lines. Break the third vacuum with nitrogen and leave 1-2 psig nitrogen pressure on R-PE101.

NOTE: The various pieces of equipment can be purged simultaneously.

- D. Pressure R-PE102 to 25 psig with nitrogen and then vent it to the scrubber until it is down to 1-2 psig. Close the vent valve and pull a full vacuum on the reactor and close the vacuum valve. Again pressure with nitrogen to 25 psig. Repeat this procedure until R-PE103 has been pressurized and evacuated three times. On the third pressurization blow nitrogen through the transfer line from R-PE102 to R-PE105 for two minutes to purge the line. Also purge all sample and drain lines. Break the third vacuum with nitrogen and leave 1-2 psig nitrogen pressure on R-PE102.

- E. Apply 25 psig nitrogen pressure to the R-PE105 system including R-PE105, E-PE305A, V-PE305, and E-PE305B. After the system has been pressured to 25 psig with nitrogen, slowly open the vent valve from E-PE305B to the scrubber and vent the system down to 1-2 psig with the nitrogen flowing through the various pieces of equipment in the order listed: R-PE105, E-PE305A, V-PE305, and E-PE305B.

When the R-PE105 system has been vented down to 1-2 psig, close the vent valve and open the valve between E-PE305B and the vacuum pump and pull the R-PE105 system down to full vacuum. Repeat the purge procedure until the system has been pressurized with nitrogen and evacuated three times. On the third pressurization blow nitrogen from R-PE105 through the transfer lines to R-PE103 and R-PE104 for at least two minutes each. Also purge all sample and drain lines. Break the third vacuum with nitrogen and leave the system under 1-2 psig nitrogen pressure.

- F. Apply 25 psig nitrogen pressure to the R-PE104 system including R-PE104, E-PE304A, V-PE304, and EPE304B. After the system has been pressurized to 25 psig with nitrogen, slowly open the vent valve from V-PE305 to the vacuum system. The system will vent through the equipment in the following order: R-PE104, E-PE304A, E-PE304B, and V-PE304. Continue until a full vacuum is pulled on the system. Repeat the procedure until the system has been pressurized with nitrogen and evacuated three times. On the third pressurization purge the R-PE104 discharge line, all raw material charge lines, and all sample and drain lines. Break the third vacuum with nitrogen and leave 1-2 psig nitrogen pressure on the system.
- G. Apply 25 psig nitrogen pressure to the R-PE103 system including R-PE103, E-303A, E-303B, and V-PE303. After the system has been pressurized to 25 psig with nitrogen, slowly open the V-PE303 vent valve to the vacuum system. The system will vent through the equipment in the following order: R-PE103, E-PE303A, E-PE303B, and V-PE303. Continue until a full vacuum has been pulled on the system. Repeat the procedure until the system has been pressurized with nitrogen and evacuated three times. On the third pressurization purge the R-PE103 discharge line, all raw material charge lines, and all sample and drain lines. Break the third vacuum with nitrogen and leave 1-2 psig nitrogen pressure on the system.

- H. When all of the equipment has been purged and blanketed with nitrogen, check the atmosphere in the scrubber tank (T-PE206) for % oxygen. The % oxygen should be less than 4% before charging the tank with kerosene. If it is not, sparge nitrogen through the tank until the oxygen content is less than 4%. When it passes the oxygen test, verify that all drain valves are closed and charge a minimum amount of kerosene into T-PE206, sufficient to supply the pump suction during circulation. Open the valves to the scrubber pump (P-E206A), and from the pump to the scrubber (C-PE401) and start the pump to circulate kerosene through the scrubber.

Note: The scrubber blower (B-PE104) will not be operated and will be locked out.

TRIMER PREPARATION

TELENE RIM SOP

VII. TRIMER PREPARATION

A. Verify the following:

1. The R-PE101 system clean, purged free of oxygen, and free of leaks.
2. All valves to and from R-PE101 closed.
3. The scrubber system in operation.
4. The DCPD tank truck grounded, wheels blocked, pressurized with nitrogen to 10 psig, and at a temperature of 130-140 deg.F.

NOTE: If air has been admitted into the DCPD unloading hose or line, it must be repurged with nitrogen.

5. The unloading line is heated.
6. The DCPD tank truck vent must be connected to a carbon absorption drum, such as Carbitrol. The carbon will absorb DCPD vapors.

CAUTION: Be sure the carbon drum is connected to the tanker vent and not the dip pipe. Otherwise DCPD would discharge through the drum to the ground upon pressurization of the tanker.

The relief valve on the tank truck coil is set at 75 psig, and the jacket relief valve is set at 25 psig.

- B. Connect the tanktruck unloading valve to the DCPD unloading line and check the connection for leaks with nitrogen.
- C. Pull a full vacuum on R-PE101 and block it in. Record the beginning weight in R-PE101.
- D. Open the DCPD charge valves and transfer 5000 lbs., +/- 50 lbs., of DCPD into R-PE101 utilizing the mass flow meter in the DCPD line. Allow for the heel which will be blown from the transfer line. Blow the transfer line clear into R-PE101 with nitrogen after closing the truck unloading valve. Record the mass transfer meter reading. Verify the accuracy of the mass meter against the level observed in the R-PE101 sight glass. A calibration chart will be issued for the sight glass. Close the top and

and bottom sight glass valves when the sight glass is not being used and drain the sight glass into a waste bucket. This is a safeguard in case the sight glass breaks. The sight glass is drained to prevent breakage from expansion of liquid blocked in the sight glass.

- E. Turn on R-PE101 agitator. Turn on the steam to the reactor coils and heat the batch to 320-325 deg.F in 30 minutes. The reactor remains blocked in during the trimer operation.
- F. Hold the batch at 320-325 deg.F for 4 hours +/-10 minutes. At the end of the hold period, cool the batch to 130 deg.F in 30 minutes by applying cooling water to R-PE101 jacket. Obtain a sample and have the lab run a GC. Use one gal. cylinder supplied by Goodrich. Notify Goodrich immediately if the sample is cloudy.

NOTE: The heat up profile, time at reaction temperature, and cool down profile must be consistent to obtain consistent trimer (CPDT) concentration.

- G. If the trimer concentration is 13-17% by GC analysis the batch is ready to transfer to R-PE102 for dilution and preparation of feed blend. If the trimer concentration is outside the 13-17% range special instructions will be issued.
- H. Two batches of DCPD/CPDT from R-PE101 will be transferred into R-PE102, which will serve as a hold tank. After two batches are in R-PE102, agitate and sample for GC analysis. The two R-PE101 batches will be transferred from R-PE102 into R-PE105 to make one batch of feedblend.

FEED BLEND PREP.  
WITH TRIMER

FEED BLEND PREP.  
WITH TRIMER



TELENE RIM SOP

VIII. FEED BLEND PREPARATION WITH TRIMER

A. Verify the following:

1. R-PE105 system clean and purged free of oxygen.
2. Scrubber system in operation.
3. Vacuum pump in operation.
4. Tempered water flowing through the primary condenser (E-PE305A). The temperature in E-PE305A must be maintained at 95 deg.F or higher to prevent DCPD freezing.
5. Cooling water flowing through the secondary condenser (E-PE305B).
6. A sufficient quantity of rubber for the batch is available in the area and the rubber chopper is ready for operation. The rubber will be chopped as it is added to R-PE105 to minimize agglomeration.
7. Drain valves closed on V-PE305.
8. R-PE105 has room to receive a transfer from R-PE102.
9. Heat on the transfer line from R-PE102 to R-PE105 if, for some reason, a solution with a low concentration of trimer is transferred. Transfer line from R-PE102 to R-PE105 is electrically traced. The higher the trimer concentration the lower the freeze point. A 85%/15% (15% trimer) solution freezes at -24 deg.F.

NOTE: Two batches of DCPD/CPDT solution will be transferred from R-PE101 into R-PE102 as a hold tank, and then transferred into R-PE105 to make one batch of feed blend.

- B. Vent R-PE105 through its overhead condensers to the scrubber and, utilizing nitrogen pressure on R-PE102, transfer the entire batch (approximately 10,000 lbs.) of DCPD/CPDT from R-PE102 into R-PE105. Blow the transfer line with nitrogen and maintain a nitrogen purge on R-PE105. Record the reactor weight.

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- C. Give the lab the weight of the batch in R-PE105 and have them calculate the quantity of DCPD to be added to the DCPD/CPDT in R-PE105 to make the desired concentration of CPDT (trimer). They will use the analysis of the R-PE101 samples taken after the trimer reactions together with the R-PE101 batch weights.

The dilution will probably be to 7.5% CPDT but may be as high as 15%. When the lab reports the quantity of dilution DCPD needed, add that quantity to the weight of the batch in R-PE105. Take 10% of that number and that will be the additional DCPD to add for the drying step. Charge the combined quantities of dilution and drying DCPD to R-PE105 following the procedure outlined in Section VII A-D. Utilize the mass transfer meter and verify with R-PE105 load cell readings. Record the reactor weights before and after the transfer.

Example:

DCPD/CPDT Solution in R-PE105    10,000 lbs.

Dilution DCPD to add per lab    11,333 lbs.

Drying DCPD to add:  
 $(10,000 + 11,333) \times 0.1$                       2,133 lbs.

Total DCPD to add:  
 $11,333 + 2,133$                               13,466

Note: On the next scheduled run a drier rubber (Diene 55 AC6) will be used and it is possible that the drying step will not be necessary. If that is the case add only the dilution quantity of DCPD, and not the drying quantity. If the drying step is not carried out, skip steps VIII.E, F, and G, except for the sampling of R-PE105. Do not add a drying quantity of DCPD or carry out the drying step unless instructed to do so by a Goodrich representative.

Typically, the trimer concentration in the 10,000 lbs. of material transferred into R-PE105 will be 15% and 10,000 lbs. of DCPD will be added, making a total of 20,000 lbs. at 7.5% trimer.

- D. Turn on the R-PE105 agitator, run at 100% speed, and charge a quantity of chopped Diene 55 (rubber), equal to 3.5% of the weight of DCPD/CPDT in R-PE105, into the reactor through the rotary valve (M-PE106). When the charge is complete, close the rubber charge valve and shut off the rotary valve. Shut off the nitrogen purge to R-PE105. Record the weight of rubber added and the reactor weight. Close the reactor vent valve and heat batch to 158 deg.F. Continue to mix at 100% speed until all the rubber is dissolved.

Note: Be sure the block valve under the rotary valve is open before starting the rubber charge to prevent a plug up.

- E. Close the R-PE105 vent valve and verify that heat is on the lines from R-PE105 to E-PE305A, from E-PE305A to V-PE305, and from E-PE305B to V-PE305. Open the R-PE305 valve to E-PE305A and the valve in the vacuum line to E-PE305B. Pull a full vacuum on the R-PE105 system.
- F. Record the R-PE105 weight and heat the material in the reactor to 158 deg.F - 194 deg.F to distill off DCPD in order to dry the batch.
- G. Continue to distill until a quantity of DCPD equal to the quantity added for drying has been removed. At this point the batch weight should be equal to the quantity of DCPD/CPDT transferred from R-PE101 plus the quantity added per lab calculation for dilution, plus the weight of rubber added.

When the distillation is complete shut off the steam to R-PE105, close the vacuum valve to E-PE305B, and break the vacuum on the R-PE105 system with nitrogen to a pressure of 1-2 psig. Take a one ounce sample of distillate from V-PE305. Drain a one gallon purge from the bottom of R-PE105 then take a sample into a DRY, CLEAN, NITROGEN PURGED VACUUM CYCLINDER FROM THE LAB. When approved by the lab, the feed blend is ready to transfer to R-PE103 or R-PE104.

The feed blend must contain less than 50 ppm water and have a gel time equal to the standard +/-60 seconds.

FAST "A" PREP.

TELENE RIM SOP

X. FAST "A" PREPARATION

NOTE: See DEAC charging instructions at the end of this section. (X.J.)

- A. The "A" formulations are only prepared in R-PE104. Before each batch, make certain that the reactor is empty, clean, dry, and is nitrogen blanketed. Pull a vacuum on the reactor and pressurize with nitrogen to 2 psig. Check its weigh scale. If the reactor needs to be cleaned, charge about 150 gallons of fresh toluene to the reactor. Verify that the vacuum pump is operating, pull a vacuum on the reactor and its receiver, V-PE304. Apply steam to the reactor jacket and distill over about one-fourth of the toluene. Shut off the vacuum valve and the steam and pressurize with nitrogen. Drum out the toluene from the reactor and the receiver. Again pull a vacuum on the reactor and receiver and gently dry with steam on the jacket.
- B. Check the cylinder weights of the DEAC, N Propanol, and SiCl<sub>4</sub> to make certain that there are sufficient materials for the formulation. The DEAC is charged using the supplier's cylinder. Refer to the RIM catalyst preparation procedure for refilling the other cylinders.
- C. Verify that the scrubber is properly charged with kerosene and its pump is circulating kerosene through the scrubber. Check the vacuum pump, VP-PE107, to be sure that it is operable.
- D. Verify that all valves on all lines to and from R-PE104 and R-PE105 are closed. Pressurize R-PE105 to 20 psig with nitrogen. Open the vent valve on R-PE104. Zero the weigh scales on R-PE104. Verify that the filter in the transfer line does have a 55 micron bag in it and that all drain valves in the line are closed. Open the valves in the transfer line from R-PE105 to R-PE104, BUT NOT THE CHARGE VALVE ON TOP OF R-PE104. Carefully drain about one gallon of feed blend from the drain valve immediately above the charge valve so as to clear the transfer line. Open the charge valve and transfer 10,000 +/-100 pounds of feed blend into R-PE104. Shut off the bottom valve on R-PE105 with enough allowance for the weight of Feed Blend in the transfer line which must be blown empty into R-PE104. Record the initial weights, final weights, start time, completion time, and initial for

TELENE RIM SOP

completion. Close all valves in the transfer line when complete.

- E. The order of addition of the DEAC, alcohols, and  $\text{SiCl}_4$  is very important to prevent rubber crosslinking. Charge the DEAC, the alcohol, and finally the  $\text{SiCl}_4$ . The neat DEAC is highly pyrophoric and will react violently with water. Extreme care and attention to operating procedures must be followed when handling this material. Charging DEAC is a two man operation. One operator wears a full protective aluminized suit and charges the DEAC. The other operator acts as back-up. He wears a face shield and gloves and holds an A1 alkyl fire extinguisher. Follow the RIM catalyst preparation procedure for charging the DEAC, alcohols, and  $\text{SiCl}_4$ .
- F. Charge 50 +/-0.5 pounds of DEAC to R-PE104 and allow to mix for ten minutes. (See X.J.)
- G. Charge approximately 105 +/-1.0 pounds of N Propanol slowly over a five minute period of time to the reactor and allow to mix for five minutes.
- H. Degas the solution by purging nitrogen through the rotameter into the bottom of the reactor under the following conditions. Set the nitrogen purge at 120 SCFH (2SCFM) and the vacuum in the reactor at 20" Hg vacuum (250 mm of Hg pressure). Heat the reactor to 122 deg.F and hold at this temperature for 5 hours. Cool the reactor to 86 deg.F and then turn off the nitrogen purge. Close the bottom valve. Pressurize the reactor to 2 psig.
- I. Charge 18 +/- 0.2 pounds of  $\text{SiCl}_4$  to the reactor and allow to mix for 15 minutes. Degas the solution for 15 minutes at 20 "Hg vacuum. When approved by the laboratory, the material may be drummed following the product drumming procedure.

Note: On the next scheduled run, one batch of fast "A" Formulation will be made using 61 +/- 0.5 lbs. of EAPC as a substitute for both DEAC and N-propanol. It is anticipated that the use of EAPC will eliminate the degassing step (X.H.). The EAPC will be added after the feed blend. After mixing, the batch will be sampled to determine the amount of ethane present. If it is low enough, the degassing step will not be carried out and  $\text{SiCl}_4$  will be added to complete the batch. The EAPC will be charged from a cylinder using the same procedure as with DEAC.

J. DEAC Charging Instructions (Refer to sketch located after X.J.)

Pay CAREFUL ATTENTION to all details of charging DEAC and the other components of the "A" formulations. One operator wears the aluminized suit to connect and operate the valves while the other operator wears a face shield and gloves and holds a fire extinguisher ready for use.

- a. Set the bottle on the scale. Is it full?
- b. Check all fittings and threads for cleanliness.
- c. Make certain that all threads are not damaged.
- d. Verify that all valves are closed.
- e. Purge N2 supply line by:
  - (i) open N2 valve to regulator
  - (ii) open N2 supply valve
  - (iii) open & close valve #1
  - (iv) set regulator at 20 psig
- f. Purge N2 bypass line by:
  - (i) open N2 supply valve
  - (ii) open & close valve #2
- g. Remove safety cap from cylinder
- h. Verify A & B valves are closed
- i. Slowly remove plug from Lig. valve B.  
(Left hand thread)  
(Exercise caution, may be liquid under the plug).
- j. Purge bypass line continuously
  - (i) crack open valve #2
- k. Connect liquid line to Valve B
- l. Open valve #1 & purge continuously
- m. Connect N2 line to Vent valve A
- n. Purge transfer line to Reactor by:
  - (i) Open valve #3
  - (ii) Open valve #4 at reactor
  - (iii) Close valve #4 when complete
- o. CHECK FOR LEAKS BY:
  - (i) Close N2 valve TO regulator
  - (ii) Watch pressure gage
  - (iii) If leaks, bubble check & correct
  - (iv) IF NO LEAKS, CONTINUE.
- p. Close valves #1, 2, 3, & 4

WHEN READY TO CHARGE REACTOR, DO FOLLOWING:

- a. Open N2 valve to regulator
- b. Open Valves A & B
- c. Open N2 supply valve and valve #1
- d. Record weight indicated by scale
- e. Open valve #4
- f. Slowly open valve #3
- g. Close #3 when charge wt. is correct

- h. Close valves A & B
- i. Open valves #2 & 3 to purge line to reactor.
- j. Close all valves except N2 supply

TO VENT PRESSURE FROM BOTTLE

- a. Open valves #2, 3, & 4
- b. Set N2 regulator at 35 psig
- c. Close valve #3
- d. MOMENTARILY open valve B
- e. Close valve B
- f. Close N2 supply valve
- g. Open valve #1 & 3
- h. Open valve A and vent bottle
- i. Close valve A
- j. Close valve #1
- k. Open N2 supply valve and purge to reactor
- l. Reset nitrogen regulator to 20 psig
- m. Close valves in order
  - (i) N2 supply
  - (ii) Valves #1, 2, 3 & 4

THE LINES TO AND FROM THE BOTTLE MAY NOW BE DISCONNECTED.

- a. Verify that all valves are closed
- b. Slowly disconnect line to valve A
- c. Slowly disconnect line to valve B
- d. Re-install plug to liq valve B
- e. Re-close safety cap
- f. Remove bottle from scale



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1/2/91

①

~20 PSIG

N<sub>2</sub> →  
N<sub>2</sub> HEADER

N<sub>2</sub> SUPPLY

SCALE

REACTO

SLOW "A" PREP.

TELENE RIM SOP

XI. SLOW "A" PREPARATION

- A. Follow the instructions for preparation of a fast "A" batch down to the charging of the feed blend as given in X.D. Charge 10,000 +/- 100 pounds of feed blend as instructed in X.D.
- B. Following procedures as given in X. E & F, charge 50 +/- 0.50 pounds of DEAC and allow to mix for ten minutes.
- C. Charge approximately 135 +/- 1.0 pounds of DMPDH solution slowly over a five minute period. Mix ten minutes.
- D. Charge approximately 50 +/- 0.5 pounds of N Propanol solution slowly over a five minute period.
- E. Complete the batch by following the instructions in X.H. and I.

"B" PREP.

TELENE RIM SOP

XII. "B" PREPARATION

- A. The "B" formulations are only prepared in R-PE103. Before each batch make certain that the reactor is clean, dry, empty, and nitrogen purged. If the reactor needs to be cleaned, follow the instructions given in X.A.
- B. Verify that the scrubber is properly charged with kerosene and its pump is circulating kerosene through the scrubber. Check the vacuum pump, VP-PE107, to be sure that it is operable.
- C. Verify that all valves on all lines to and from R-PE103 and R-PE105 are closed. Pressurize R-PE105 to 20 psig with nitrogen. Open the vent valve on R-PE103. Zero the weigh scales on R-PE103. Verify that the filter in the transfer line does have a 55 micron bag in it and that all drain valves in the line are closed. Open the valves in the transfer line from R-PE105 to R-PE103, BUT NOT THE CHARGE VALVE ON TOP OF R-PE103. Carefully drain about one gallon of feed blend from the drain valve immediately above the charge valve so as to clear the transfer line. Open the charge valve and transfer 10,000 +/- 100 pounds of feed blend into R-PE103. Record the initial weights, final weights, start time, completion time, and initial for completion. Close all valves in the transfer line when complete.
- D. Vent the reactor down to atmospheric pressure. Charge 150 +/- 1.5 pounds of Mark 2112 to the reactor. Charge 150 +/- 1.5 pounds of Ethanox 330 to the reactor. Charge 110 +/- 1.0 pounds of Moly catalyst solution (40% in DCPD/CPDT) to the reactor. Pressurize the reactor twice to 15 psig with nitrogen. Mix for 30 minutes.
- E. Degas the solution for 30 minutes at 20 "Hg of vacuum while agitating. Pressurize the reactor to 20 psig with nitrogen in preparation for drumming the product.

Note: On the next scheduled run, two finished batches of "B" Formulation will have carbon black added to make "Carbon Black B Formulation." The carbon black will be an 18% slurry in "B" Formulation and three drums (1110 lbs.) will be added to each batch. Both the carbon black slurry, and Moly catalyst solution, will be mixed by means of a drum roller before addition. The reactor will be fairly full so watch out for carry over, especially on the degassing step.

DRUMMING OF PRODUCTS

TELENE RIM SOP

XIII. DRUMMING OF PRODUCTS

- A. The products are shipped in epoxy lined drums (US DOT 17C Whittaker liner 108T35 or Mobil 17C/Liner C124). Bring the drums inside out of the weather at least twenty four hours before they must be loaded with product. Inspect the lining and nitrogen purge the drums through a dip pipe for a minimum of 8 hours to remove moisture and completely nitrogen blanket the drums. As soon as 25-30 drums are purged, start purging more. Replace bungs after purging.
- B. When ready to drum out a product, shut off the agitator and pressurize the reactor to 15 to 20 psig with nitrogen. Verify that the filter has a clean bag in it (Nylon mesh 55u-X-1-R). Purge the drumout line, filter and dip pipe with nitrogen. Transfer and filter the formulation into purged drums using a dedicated transfer line. Maintain a nitrogen purge at the top of the drum during this transfer step. Take a one gallon QC sample in a DRY CLEAN NITROGEN PURGED FIVE GALLON CYLINDER. Use Teflon tape to seal the bung fitting on the Rieke bung seals. Make sure the drum is properly sealed and labeled. Paint the top of the "B" formulation drums Blue. Paint the top of the "A" formulation drums Red. Stencil the top of the drum with the lot number.

The 5 gal. sampling cylinders will be reused. Empty the cylinder into a waste drum. Flush with 1 gal. of feedblend and empty into a waste drum. The cylinder may then be reused.

Don't use the same cylinder for "A" and "B" components. The same cylinder can be used for fast and slow "A" component after being flushed with feed blend.

SCRUBBER OPERATION



TELENE RIM SOP

XIV. SCRUBBER OPERATION

- A. The scrubber operates by dissolving or absorbing the various noxious compounds used in the process in the circulating cool kerosene. Check once an hour to verify that the pump is circulating kerosene through the scrubber and that the cooling water is flowing through the cooler, E-PE401. Once a shift take a sample of the kerosene to be analyzed for DCPD. If the concentration of DCPD rises above 15% add fresh kerosene to dilute the DCPD concentration. Kerosene from the scrubber will be disposed of at the end of the run. Used kerosene can be used for the dilution if it was not used for DEAC conditioning. Properly label and store any spent kerosene for disposal. Do not operate the scrubber blower, B-PE401, at any time. This could result in sucking air into the scrubber system which could result in a fire or explosion. Check the vapor space of T-PE206 and the scrubber gases once a shift for % oxygen (it should always be below 4%).
- B. The procedure for establishing an inert atmosphere in the scrubber system is found in Section VI (Nitrogen Purge). If air gets into the system, immediately shut down the scrubber pump and purge the entire system carefully with nitrogen until the concentration of oxygen is below 4%.

Note: "A" component sample drums, and the drums of toluene contaminated with DEAC, must each be neutralized with 1 pint of pure N-propanol before adding to a vessel with any "B" component in it. A 5 gal. can of N-propanol will be available for this purpose.

POST OPERATION CLEANUP

TELENE RIM SOP

XV. POST OPERATION CLEANUP

A. TRIMER REACTOR CLEANOUT (R-PE101)

1. Verify that the reactors, receivers, vacuum pump system including knockout pots, and scrubber system including T-PE206 are all adequately nitrogen purged. Verify that the scrubber system is operating properly. Verify that all reactors and receivers are empty.
2. Turn on the vacuum pump and open the vacuum valve on R-PE101 and pull a sufficient vacuum on R-PE101 to be able to charge toluene from drums, which have been attached to a grounding strap. Charge ten drums, each of which is properly grounded while being unloaded, of fresh toluene through the DCPD charge line into the reactor and blow the line clear with nitrogen. Shut off the vacuum valve and break vacuum with nitrogen.
3. Turn on R-PE101 agitator and close the vent valve. Open the steam valve to the reactor jacket and heat the toluene to 160 deg.F and hold this temperature for four hours.
4. Shut off the steam. Block in the reactor and pressurize to 20 psig with nitrogen.
5. After emptying the reactor to R-PE102 as described in, XV.B.1. vent it down to atmospheric pressure. Pull as much vacuum as possible on the reactor to remove toluene. Shut off the vacuum valve and break vacuum with nitrogen. Inspect the reactor for cleanliness.

B. TRIMER HOLD TANK CLEANOUT (R-PE102)

1. Verify that R-PE102 is empty. Verify that its drain and sample valves are closed, it is vented to the scrubber, and it's agitator is on. When the clean out of R-PE101 is complete, transfer the toluene from R-PE101 into R-PE102 by means of nitrogen pressure on R-PE101. Drain all sample and drain valves, catching the toluene in a container.
2. Close the R-PE102 vent valve and, with R-PE102 blocked in, turn on the steam to its jacket and heat the toluene to 160 deg.F. Hold it at 160 deg.F for

four hours.

3. At the end of four hours, shut off the steam and pressurize it to 20 psig with nitrogen.
4. After emptying R-PE102 into R-PE105 as described in XV.C., vent it to atmospheric pressure. Pull as much vacuum on R-PE102 as possible to remove toluene. Shut off the vacuum valve and break the vacuum in R-PE102 with nitrogen. Inspect the reactor for cleanliness.

C. FEED BLEND REACTOR CLEANOUT (R-PE105)

1. Verify that R-PE105 and its receiver (V-PE305) are empty. Verify that the drain valves are closed, the reactor vent valve to E-PE305A is open and the agitator is on. After the cleanout of R-PE102 is complete as outlined in Section XIV.B.1-4, transfer all of the toluene from R-PE102 into R-PE105 by means of nitrogen pressure on R-PE102. Nitrogen blow the line well between R-PE102 and R-PE105. Drain all sample and drain lines, catching the toluene in a container. Verify that cooling water is on to E-PE305B.
2. Close R-PE105 vent valve. Agitate and heat the toluene to 160 deg.F and hold at that temperature for two hours. Open the vent valve to E-PE305A and distill over about 200 lbs. of toluene into the receiver V-PE305. Close the vent valve and apply nitrogen pressure to V-PE105. Empty V-PE305 into waste drums which are clearly marked and properly grounded, unless a waste truck is available. If it is, empty V-PE305 into the waste truck.

D. FORMULATION "A" REACTOR CLEANOUT (R-PE104)

1. Verify that the reactor, R-PE104, and its receiver are empty. Verify that the drain valves are closed, the reactor vent valve is open and the agitator is on. After step XV.C.2 of the feed blend reactor cleanout is complete, transfer about half of the remaining toluene wash from R-PE105 to R-PE104 by means of nitrogen pressure on R-PE105. Verify that cooling water is flowing through the condenser, E-PE304A.

2. Close the R-PE104 vent valve. Agitate and heat R-PE104 for two hours at 160 deg.F. Open the vent valve to distill over about 200 pounds to the receiver. Shut off the vent valve and pressure with nitrogen. Empty both the reactor and receiver into waste drums which are clearly marked and properly grounded. The waste toluene from R-PE104 must never be reused for either the feed blend reactor or the "B" formulation reactor cleanouts. If a waste tank truck is available, empty R-PE104 and the receiver into the truck.
3. With the vent valve on the reactor open, connect a steam hose to the bottom of the reactor and open the steam valves and the reactor bottom valve. Close the reactor vent valve and slightly crack open the vent valve on the receiver. Collect about 5 gallons of condensate in the receiver. Shut off the steam and the bottom valve on the reactor and cool. Drain out the condensate from the receiver to a waste drum or pressurize into the waste truck.
4. After completion of all toluene washes to all reactors, receivers and cleanout of the scrubber system, open the manway on R-PE104 and visually inspect for cleanliness. If necessary, clean any polymer from the reactor surfaces using hot soapy water in the hydroblaster.

E. FORMULATION "B" REACTOR CLEANOUT (R-PE103)

1. Verify that the reactor, R-PE103 and its receiver are empty and that the bottom drain valves are closed. Verify that cooling water is flowing through the condenser, E-PE303A. Verify that the vacuum system is operable, the scrubber system is operating properly, and that the reactor, receiver, and scrubber system are adequately nitrogen purged. Turn on the reactor agitator. Open the vent valve on the reactor.
2. Transfer the remainder of the wash toluene in R-PE105 into R-PE103. Close the reactor vent valve and open the receiver vent valve. Heat and agitate the wash to 160 deg.F and distill over about 200 pounds to the receiver. Shut off the steam and vent valves. Pressure to 1-2 psig with nitrogen. Drain out the reactor and receiver contents to waste drums, which are properly grounded. If a waste truck is available, transfer the toluene from R-PE103 and the receiver into the truck.

F. VACUUM AND SCRUBBER CLEANOUT

1. After completion of all toluene cleaning of the reactors and receivers, the vacuum and scrubber systems may be shut down and cleaned.
  2. Turn on the vacuum pump and clear with nitrogen. Shut the pump down and be certain that its cooling jacket will not freeze. Drain the knockout pot, V-PE401A into a waste drum and properly label and store it.
  3. Pump the scrubber system empty into waste drums, which are properly grounded. Be certain that the drums are properly labeled and stored. If a waste tank truck is available, pump the scrubber liquor into the waste truck. Shut off the cooling water to the cooler, E-PE401, and drain it empty to prevent freezing. After verifying that the scrubber tank is empty, fill it one-third full of hot soapy water and circulate it to complete cleaning of the scrubber system. Dispose of the wash properly.
- G. If a waste truck is available, any samples or other wastes should be disposed into it. No more than trace quantities of water should go into the waste truck. The scrubber water wash should definitely not go into the waste truck. If it is more convenient, waste in drums or small containers can be vacuumed into one of the reactors and pressured into the waste truck.

WASTE HANDLING

TELENE RIM SOP

XVI. WASTE HANDLING

- A. This process will generate the following wastes:
1. Sample purges of DCPD. (1 gal/batch)
  2. Wet distillate of DCPD (2000 #/batch)
  3. Feed blend sample purges. (4 gal/batch)
  4. Feed blend line purges. (3 gal/batch)
  5. Fast A sample purges. (2 gal/batch)
  6. Slow A sample purges. (2 gal/batch)
  7. Part B sample purges. (1 gal/batch)
  8. Part A vacuum receiver condensate. (?)
  9. Part B vacuum receiver condensate. (?)
  10. Vacuum pump knockout pot liquids. (?)
  11. Spent kerosene. (1500 gal min.)
  12. Spent filter bags. (3/batch)
  13. Spent toluene. (16 to 18 drums/batch)
  14. Quality control samples. (?)
  15. Spent soapy wash water. (?)
- B. Almost all of the wastes will be hazardous due to flash point (each must be individually tested). If hazardous, the waste drum must be properly labelled with hazardous waste stickers, flammable warning stickers (if appropriate), and clearly stencilled with a description of the contents and date filled. During the production run the hazardous wastes will be kept in the department holding area.
- C. Great care must be exercised to assure that wastes from the part A formulations are not mixed with those from the part B formulation. Mixing the two could result in drum rupture and possibly fire.
- D. Always take time to know and follow plant and governmental procedures for properly handling and identifying these wastes.



DATE: October 14, 1991

TO: Gene Pearce

FAX (501) 572-3795

FROM: M. A. Ackerman

SUBJ: BFGoodrich Visit to Cedar (West Helena Plant) on 10/29

*Tuesday*  
Gene, I have spoken with Geoff Pratt and Tom Lodice about a visit on Thursday, 10/29, to the Cedar Plant. BFG participants will be: John Standish (Telene Technology Manager), Jim Lenzotti (Telene Bench Chemist), Dale Hutter (Technology group member) and myself. Tom thought this would be an acceptable day.

We intend to arrive late on Monday night, 10/28, in West Helena and will be at the plant between 8:15 - 8:30 a.m. Tuesday, 10/29. We'll have all day available and will leave in the later afternoon.

Below is a proposed agenda:

- 0830 Arrive at office - (Meet Tom Lodice, Joel Walker)
- 0845 - 1130 (Lodice, Walker), Tour Unit #1 (observe equipment changes, show John, Dale, Jim operation)
- Tag nitrogen lines for testing
  - Obtain any maintenance help to pipe up Nitrogen lines to O<sub>2</sub> & H<sub>2</sub>O meters
  - Test nitrogen (if more time is required Dale will finish in afternoon).

**\*\*NOTE:** We would like to have your Air Products rep. present during the test and have them test the nitrogen also to confirm our checks plus to be available to discuss any issues. Will you please set this up?

- Helium Leak Detection

*10:15  
Info  
DHT  
10/15*

Prior to the December run startup we will want to check all Telene vessels with a helium leak detector. We have the detector and have used it at BRDC. Will R4 be available to pressure up with a helium/nitrogen mixture so that we can test with our instrument? If at all possible, we'd like to do this. This will give us all some first hand experience on how tight the vessels are and how the instrument works. We will probably leave the instrument with you at Cedar so that it can be used to check the system again just before the run. Do you have cylinder helium available at the plant? If not, please let me know so that we can ship some helium down for the test.

1130 - 1200 Tour Labs

Post-It™ brand fax transmittal memo 7571		# of pages 2
To: <i>Gene Pearce</i>	From: <i>Mark Ackerman</i>	
Co:	<i>BFGoodrich</i>	
Dept:	Phone # <i>(214) 447-5293</i>	
Fax #	Fax #	

EXHIBIT

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WH0000023962/1

- 1200 - 1300      Lunch
- 1300 - 1500      Technology exchange (Gene Pearce, M. J. Pocrass,  
Joel Walker, George Forenger, Greg Satterfield, Tom  
Iodice)  
Presentation by BFG  
- What went wrong in July?  
- What are the major process changes for December?  
- What are the QC changes for December?  
- What is different about how we prep vessels for  
the run?  
- Schedule for the December run.
- 1500-1600      - Confirm nitrogen quality test results and confer  
if problems  
- Tie up any loose ends

Please feel free to have others in your staff attend the technology review. I am only sending you this fax, so please distribute to your staff. We'll need an overhead transparency projector for the presentation, please.

We in BFG are looking forward to confirming the nitrogen purity is "as advertised" prior to the December run plus bring your staff up to speed with our latest thoughts. We anticipate a successful December run. Thank you for your support.

M. A. Ackerman  
M. A. Ackerman (9)

cc: Geoff Pratt - Cedar Chem - FAX 901-684-5390  
B. Scott  
R. LaCosse  
J. Standish  
J. Lenzotti  
D. Hutter  
P. Lane  
P. Howes  
J. Comanita  
D. Janda

FAX MESSAGE COVER SHEET

THE BFGOODRICH COMPANY  
SPECIALTY POLYMERS & CHEMICALS DIVISION  
9921 Brecksville Road, R-Bldg., Lobby  
Brecksville, Ohio 44141

☐

URGENT

☐

PLEASE REPLY

☐

CONFIDENTIAL

☐

F.Y.I

DATE:

July 8, 1991

TIME:

2:25 pm

TO:

Seave, Levine, Whitefield, Walker, Parker & Wingard

LOCATION:

Orange Point

FAX #:

FROM:

Mark L. Williams

PHONE #:

MESSAGE:

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET) 4

Our return FAX number is: (216) 447-5431.

If you have a problem with the transmission of this message, please  
call Linda immediately at (216) 447-5316.

EXHIBIT

N

DATE: July 5, 1991

TO: Geoff Pratt Cedar FAX 901-684-5398

FROM: M. A. Ackerman BFGoodrich

SUBJ: Telene<sup>3</sup> RIM Formulation Run - 7/91 (Revisions As Of 7/5/91)

Since my run summary note some things have changed. This is the latest. We will need to make 210,000 lbs of Telene RIM formulations with the following breakdown: NOTE: The schedule was reduced by 20 M lbs due to Velsicol not having enough DCPD available.

I. Schedule

	<u>lbs</u>	<u>Batches</u>
Fast A	40,000	4
Fast A (with EAPC vs N-prop/DEAC)	10,000	1
Slow A	40,000	4
Neat B	60,000	6
Carbon Black B (0.2% CB)	30,000	3
Feedblend (Drummed as Product)	20,000	1 (+9) = 10
Trimer (15%) (Drummed as Product)	<u>10,000</u>	2 (+20) = 22
	210,000	

At 20,000 lbs/feedblend this will be 10 feedblends. At 10,000 lbs/A component Rx that is 9 A's. At 10,000 lbs/B component that is 9 B's and at 2 trimer reactions per feedblend (plus 2 trimer reactions drummed as product) that is  $(2 \times 10) + 2 = 22$  trimer reactions. As you can see, things are picking up a little.

II. Raw Materials

There will be 5 trucks (40,000 lbs each) of DCPD.

III. Sequence

A. Plant Prep

I would like to start the production on 7/15. I have ordered the first DCPD truck on Monday, 7/15 by 12 noon. If all modifications can be done and the system water & toluene boiled by then, we'll start a trimer reaction on 7/15. I will do a quick safety tour after I arrive at about noon on 7/15 before the run but I suspect, due to

the minor changes from January, that this won't cause a holdup. If you're ready before I get there you can also DEAC condition the A reactor.

B. Production

This is the way I see the production sequence.

1. A Reactor - Make 1 Fast A, then 4 Slow A's, then 3 more Fast A's, then the EAPC Fast A.
2. B Reactor - Make the 6 Neat B's, then the 3 CBB's.
3. The feedblend batch, which we will drum, will be the last feedblend.
4. The last 2 trimer reactions will be the ones we drum.

C. Cleanup

After the run is complete the toluene boil out will be done. I would like to observe the rubber buildup in the FB, A&B vessels after this. I would like to have a Ross waste truck arrive as soon after the cleanup is done as possible so that the kerosene from the scrubber and the toluene from the reactor clean can be pumped directly into the bulk waste truck (ie. - don't drum it, then pump it into truck). It is Cedar's responsibility to schedule this. I'd recommend warning them we'll need it about 7/29 but don't have them send the truck until it's confirmed. The few drums of A & B component samples should also be pumped into the waste truck (after the A is neutralized with alcohol. I don't think my comment on this got into the procedure. Please make sure it's documented). It may be easiest to suck the drums into the reactor with toluene and pump all to the truck.

IV. Technical Changes

A. B-Reaction

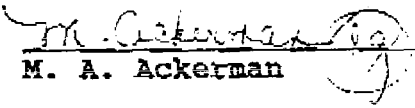
1. We have just approved a recipe change for all neat and carbon black B reactions. Instead of using 1.5% Ethanox 330 and 1.5% Mark 2112 in each B we will use 1/3 this amount or 0.5% of each. This represents 50 lbs of each per batch instead of 150 lbs of each.
2. We have just approved a new carbon black recipe for carbon black B's. We will now make a 0.2% CBB instead of 2.0% CBB. Instead of adding ~1100 lbs of 18% carbon black B, we will now add about 110 lbs of 18% carbon black B per 10,000 lbs batch.

**B. Packaging**

1. Please do not use teflon tape on the drum bungs (as we had previously specified in the procedure). We have found that the teflon tape inadvertently gets into the drum and plugs up our molder's mixhead (machinery).
2. I will have a list with me at the run describing the lot numbers & labels needed for each batch.

**FINAL NOTE:**

I will be present for the entire run. Dennis Janda will be in plant from 7/15 to 7/20. Paul Wiland (gel tester) will be present the whole run. Roger LaCrosse (my boss) will be visiting 7/17 and Mark Thiel (Design Engineer) will visit 7/18 & 7/19.

  
M. A. Ackerman

maa7.8/lg

cc: Cedar Plant - FAX (501) 572-3795

G. Pearce  
T. Lodice  
G. Satterfield  
J. Walker  
C. Parker  
J. Wagner

**BEG**

P. Lane  
J. Standish  
P. Howes  
J. Comanita  
D. Janda  
B. Scott  
R. LaCrosse  
J. Lenzotti  
P. Wiland

Monday, June 26, 2000

**BFG Materials Received** From 1/2/99 To 1/1/20

<i>Date</i>	<i>RR</i>	<i>Supplier</i>	<i>Shipper</i>	<i>Container</i>	<i>Item No</i>	<i>Product</i>	<i>Misc Items</i>	<i>Qty</i>
6/15/99	14661	BFG	Blackhawk	7024	0	Telene A&B	Telen Rim Poly	430
7/14/99	14433	BFG/Blackhawk	Blackhawk	7021	0	Telene A&B	Telene Labels	1,000
8/25/99	15107	BFG/Blackhawk	Blackhawk	8541	0	Telene A&B	Rework Material-77dr	33,110
<b>Total By Item:</b>								<b>34,540</b>
7/13/99	14430	BFG	Blackhawk	8541	5250	Telene Rim A&B	Rework Material-55gal	80
8/26/99	15116	BFG	Blackhawk	7021	5250	Telene Rim A&B	Rework Material-55gal	49
<b>Total By Item:</b>								<b>129</b>

EXHIBIT

P

<i>Date</i>	<i>RR</i>	<i>Supplier</i>	<i>Shipper</i>	<i>Container</i>	<i>Item No</i>	<i>Product</i>	<i>Misc Items</i>	<i>Qty</i>
4/28/99	12848	BFG	AM R/R	GLNX3569	90050	DCPD		180,400
4/28/99	12844	BFG	AM R/R	NATX230184	90050	DCPD		178,100
5/1/99	13698	BFG	AM R/R	UTLX640086	90050	DCPD		178,800
5/1/99	13697	BFG	AM R/R	UTLX640088	90050	DCPD		178,100
5/4/99	13696	BFG	AM R/R	UTLX640074	90050	DCPD		177,800
5/5/99	13700	BFG	AM R/R	UTLX640081	90050	DCPD		179,100
5/5/99	13701	BFG	AM R/R	GLNX23002	90050	DCPD		180,000
5/5/99	13702	BFG	AM R/R	NATX230199	90050	DCPD		179,200
5/5/99	13703	BFG	AM R/R	NATX230189	90050	DCPD		177,700
5/21/99	15083	BFG	AM R/R	GLNX23002	90050	DCPD		180,000
5/21/99	15084	BFG	AM R/R	UTLX640074	90050	DCPD		177,800
5/24/99	14737	BFG	Roadway	94207	90050	DCPD		1,600
6/30/99	14247	BFG	Am RR	NATX230194	90050	DCPD		184,000
7/1/99	12820	BFG	AM R/R	NATX230191	90050	DCPD		184,000
7/5/99	14246	BFG	AM R/R	GLNX86078	90050	DCPD		183,800
7/7/99	14479	BFG	AM R/R	NATX230183	90050	DCPD		183,900
7/7/99	14478	BFG	AM R/R	UTLX640074	90050	DCPD		182,800
7/7/99	14477	BFG	AM R/R	GLNX23002	90050	DCPD		183,000
7/14/99	12808	BFG	AM R/R	UTLX640088	90050	DCPD		182,600
7/14/99	12809	BFG	AM R/R	UTLX640090	90050	DCPD		184,300
8/4/99	14589	BFG	AM R/R	UTLX661103	90050	DCPD		178,700
8/4/99	14599	BFG	AM R/R	GLNX23189	90050	DCPD		184,600
8/4/99	14590	BFG	AM R/R	NATX230185	90050	DCPD		184,600
8/4/99	14588	BFG	AM R/R	NATX230187	90050	DCPD		184,400



<i>Date -</i>	<i>RR</i>	<i>Supplier</i>	<i>Shipper</i>	<i>Container</i>	<i>Item No</i>	<i>Product</i>	<i>Misc Items</i>	<i>Qty</i>
							<b>Total By Item:</b>	<b>4,169,300</b>
5/14/99	14216	BFG	Cunningham	PB-04-80413	90060	Kerosene		2,025
6/22/99	14291	BFG	Cunningham	4	90060	Kerosene		2,052
7/7/99	14813	BFG	Cunningham		90060	Kerosene		2,000
7/31/99	14411	BFG	Cunningham	B212135	90060	Kerosene		1,974
8/13/99	14538	Cunningham	Cunningham		90060	Kerosene	gallons	1,002
							<b>Total By Item:</b>	<b>9,053</b>
5/17/99	14269	BFG	Blackhawk	1816	90210	Diene 55		24,166
6/8/99	14224	BFG	Blackhawk	7031	90210	Diene 55		43,836
6/22/99	14293	BFG	Blackhawk	BFG1267	90210	Diene 55	Pallets	10
7/2/99	14787	BFG	Blackhawk	9901	90210	Diene 55		4,300
7/14/99	14433	BFG/Blackhawk	Blackhawk	7021	90210	Diene 55		16,860
7/14/99	14434	BFG/Blackhawk	Blackhawk	7021	90210	Diene 55		16,860
7/20/99	14475	BFG	Blackhawk	7024	90210	Diene 55		16,860
7/27/99	14387	BFG	Blackhawk	8541	90210	Diene 55		16,860
8/5/99	14493	BFG	Blackhawk	7021	90210	Diene 55		16,860
							<b>Total By Item:</b>	<b>156,612</b>
5/12/99	14205	BFG	Consolidated Freightwa	17723	90220	DEAC		1,080
7/19/99	14465	Witco	Consolidated Freight	7-1964	90220	DEAC		1,100
							<b>Total By Item:</b>	<b>2,180</b>
5/19/99	15072	BFG	Blackhawk	1816	90320	N-Propanol	Drums	3
8/25/99	15108	BFG/Blackhawk	Blackhawk	7021	90320	N-Propanol	2dr	740
8/26/99	15113	BFG	Blackhawk	1815	90320	N-Propanol	1dr	430
							<b>Total By Item:</b>	<b>1,173</b>

<i>Date</i>	<i>RR</i>	<i>Supplier</i>	<i>Shipper</i>	<i>Container</i>	<i>Item No</i>	<i>Product</i>	<i>Misc Items</i>	<i>Qty</i>
5/18/99	14279	Grace Davison	Roadway	111850	90330	SICL 4	45 Ctns	1,140
5/19/99	15072	BFG	Blackhawk	1816	90330	SICL 4	Bags & Cases	21
6/14/99	14650	Creanova	USF Dugan	495505	90330	SICL 4	1-Cyl	1,484
7/2/99	14792	Sivento	USF Dugan	498843	90330	SICL 4		1,484
7/22/99	14365	Sivento	USF Dugan	495909	90330	SICL 4	1-cyl	1,484
8/9/99	14508	BFG	USF Dugan	495539	90330	SICL 4	1-cyl	1,484
<b>Total By Item:</b>								<b>7,097</b>
7/15/99	14443	BFG	Roberts Express	2653	90340	DMPOH	1-dr	320
<b>Total By Item:</b>								<b>320</b>
6/10/99	14326	BFG	Blackhawk	7021	90360	Ethanox 330		14,109
6/17/99	14678	BFG	Blackhawk	7031	90360	Ethanox 330		13,228
6/25/99	14310	BFG	Blackhawk	7031	90360	Ethanox 330		13,227
8/13/99	14536	BFG	Blackhawk	7031	90360	Ethanox 330	20Kg Bags	60
<b>Total By Item:</b>								<b>40,624</b>
5/19/99	15072	BFG	Blackhawk	1816	90370	Norcat Cat	skids	40
6/14/99	14651	BFG	Blackhawk	7299	90370	Norcat Cat		11,050
6/22/99	14293	BFG	Blackhawk	BFG1267	90370	Norcat Cat	Drums	11,610
7/14/99	14434	BFG/Blackhawk	Blackhawk	7021	90370	Norcat Cat	skids	24
7/14/99	14434	BFG/Blackhawk	Blackhawk	7021	90370	Norcat Cat	Partial Skid	1
7/27/99	14387	BFG	Blackhawk	8541	90370	Norcat Cat	25skd	10,750
7/30/99	14406	BFG	Blackhawk	8542	90370	Norcat Cat		4,000
<b>Total By Item:</b>								<b>37,475</b>

<i>Date</i>	<i>RR</i>	<i>Supplier</i>	<i>Shipper</i>	<i>Container</i>	<i>Item No</i>	<i>Product</i>	<i>Misc Items</i>	<i>Qty</i>
5/19/99	15072	BFG	Blackhawk	1816	90380	Carbon Black	skids	8
6/22/99	14293	BFG	Blackhawk	BFG1267	90380	Carbon Black	Drums	12
<b>Total By Item:</b>								<b>20</b>
5/10/99	14185	Cone Solvents	Cone Solvents	2550	90480	Heptane	gals	1,320
5/19/99	15074	Cone Solvents	Cone Solvents	342	90480	Heptane	gals	550
5/21/99	15086	BFG	Cone Solvents	125505	90480	Heptane	gals	550
8/19/99	14570	Cone Solvents	Cone Solvents	342	90480	Heptane		1,210
<b>Total By Item:</b>								<b>3,630</b>
5/17/99	14269	BFG	Blackhawk	1816	90550	BHT		19,250
7/2/99	14787	BFG	Blackhawk	9901	90550	BHT		32,560
7/20/99	14475	BFG	Blackhawk	7024	90550	BHT		20,000
<b>Total By Item:</b>								<b>71,810</b>
5/11/99	14192	BFG	Blackhawk	1815	90560	EPAC	2-Cylinders	548
6/4/99	none	Witco	Fort Transfer	61-517,502	90560	EPAC	1-Bulk	4,220
7/2/99	14788	Witco	Fort Transfer	179-60619	90560	EPAC		1,500
7/21/99	14353	Witco	Dana Trans	60617	90560	EPAC	1-cyl	2,839
8/15/99	14542	Witco	Dana Transport	WITU000205-2	90560	EPAC		2,900
<b>Total By Item:</b>								<b>12,007</b>

## Unit 1

BFG 5/19/99-8/20/99

Material	Form	Where	Max	Avg	Comments
BHT	50# Bags	Warehouse	20000	10000	
Carbon Black	55 gal Drums (Li	R-1104	4080	2040	In DCPD
DEAC ✓	250# Cylinder	Warehouse	2000	1000	
DCPD ✓	Rail Car (Liquid)	Rail Car	600000	400000	
DMPOH ✓	55 gal Drums (Li	Warehouse	350	350	
EPAC ✓	3000# Cylinder	Warehouse	6000	3000	
Ethanol	50# Bags	Warehouse	20000	10000	
Moly Catalyst	55 gal Drums (Li	R-1108	4080	2040	In DCPD
n-Propanol	55 gal Drums (Li	Warehouse	350	350	
SiCl4	1500# Cylinder	Warehouse	3000	1500	
Trimer	Bulk Liquid	R-1110 & R-1113	54000	40000	In DCPD
Diene Rubber	1680# Bales	Warehouse	33600	17000	
4-Octyne	55 gal Drums (Li	Unit	325	325	
"A" Component	430# Drums (Liq)	Unit	98040	24510	Product
"B" Component	430# Drums (Liq)	Unit	98040	24510	Product
"A" Component	Bulk	R-1107	24510	24510	Product
"B" Component	Bulk	R-1112	24510	24510	Product

EXHIBIT

Q

## Telene Asset Effective Model

Step	Equipment	Operation	Time	Activity	Inst Rate
<b>Trimer Production</b>					
1	R-1102	Charging DCPD	0.75	Cycles/day**	lb/day Telene
		Degas to remove oxygen	0.5	3.56	87147
1lb Step 1 = 2.45lb Telene		Heat Up	1.5		
		Heat Soak	2.5		
		Cool Down	1		
		Transfer to R-1105	0.5		
		<b>Total</b>	<b>6.75</b>		
<b>Rubber Solution Production</b>					
2	R-1105	Charging Trimer from R-1105	0.5	3.69	90498
		Charging DCPD	0.25		
1lb Step 2 = 1lb Telene		Charging Rubber	0.5		
		Charging BHT	0.5		
		Degas to remove oxygen	1		
		Heat UP	2.5		
		Charging DCPD	0.5		
		Transfer to R-1106	0.75		
		<b>Total</b>	<b>6.5</b>		
<b>Strip</b>					
3	R-1106	Charging Feedblend from R-1105	0.75	3.69	90498
		Stripping Feed Blend to remove water	1.75		
1lb Step 3 = 1lb Telene		Charging make up DCPD	0.25		
		Charging Sieve to remove water	0.25		
		Cool Down	2.5		
		Transfer to either R-1107 or R-1103 & R-1104	1		
		<b>Total</b>	<b>6.5</b>		
<b>"A" production and Packout</b>					
4	R-1107	Charging Feedblend	1	2.18	53476
		Degas to remove oxygen	0.5		
1lb Step 4 = 1lb Telene		Charging EPAC	1		
		Wait for lab results	1		
		Degas to remove ethane	2		
		Cool Down	1.5		
		Packout	4		
		<b>Total</b>	<b>11</b>		
<b>"B" Production and Packout</b>					
5	R-1103	Charging Feedblend	1.5	3.43	84034 *
	R-1104	Degas to remove oxygen	0.5		
		Charging Moly	0.5		
1lb Step 5 = 1lb Telene		Charging Carbon	0.5		
		Packout	4		
		<b>Total</b>	<b>7</b>		

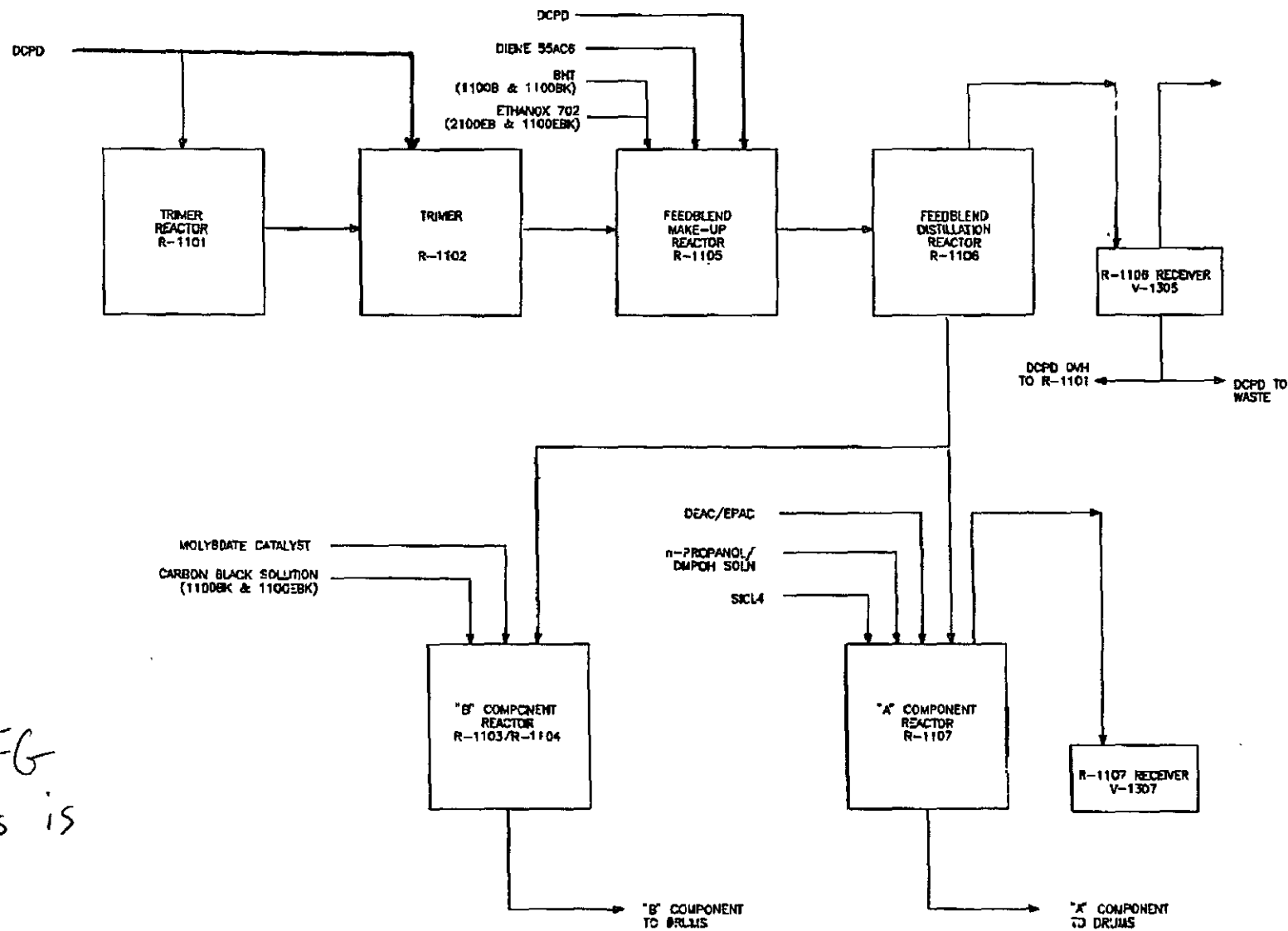
\* Step 5 is parallel to and paired with step 4. Step 4 production limits step 5 production.  
 Step 5 production must always = step 4 production.  
 Total Telene production is = to (step 4)+(step 5)

\*\* One Cycle produces 24510 lb of Telene

RR cars are moved about 3 times/week. This can delay DCPD charges by 2-3 hr.

EXHIBIT

R



# FedEx® Express

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Thompson Hine LLP  
3900 Key Center  
127 Public Square  
Cleveland, OH 44114



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Mr. Lance Nixon  
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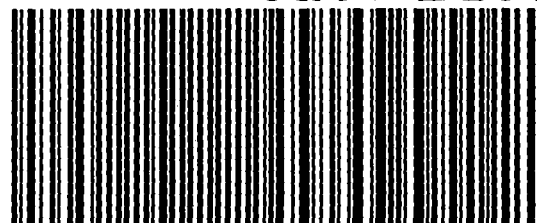
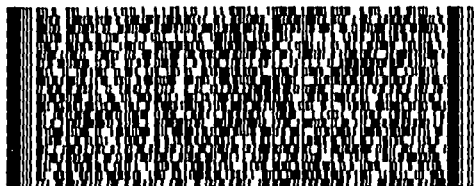
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25OCT12

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75202 -TX-US

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